



# ***Freeman Flash***

**NEWSLETTER of the FREEMAN FIELD  
FLYING ASSOCIATION**

Volume XXI, Number 7, **August, 2019**

Larry Bothe, Editor

Website: [www.freemanfield.org](http://www.freemanfield.org)

## **Dakota Garlick Now IA**

Dakota Garlick, shop manager at Cherry Hill Aviation, spent the first full week of August in school down in Tennessee to prepare for the FAA Inspection Authorization test. After taking and passing the rigorous 50-question test on the last day, Dakota went to the FAA offices in Plainfield, IN and met with a Maintenance Inspector to show proof of completion of his experience requirements, and to process his IA certificate application. He came home with the new certificate in hand on Monday, 8/12.

Having Inspection Authorization means a lot more than just being able to perform and sign off annual inspections. Aviation mechanics holding IA authority can also perform major airframe alterations, and sign the plane off as airworthy for return to service. A regular A&P mechanic can only repair an airplane exactly as it was before; they can't make any changes.

Dakota having IA authority is a big boost for Cherry Hill Aviation, and for their customers. Before, when a plane came in for Annual Inspection, Lance Bartels (owner) had to be there to do the actual inspection, and to sign it off when everything was completed. Now Dakota can perform those tasks when Lance is off on a jet trip. Dakota is also a private pilot, and holds endorsements for high performance, complex airplane, and conventional (taildragger) landing gear.

### **Special Ops at SER**

160<sup>th</sup> Special Operations Aviation Regiment, called the Night Stalkers and based at Ft. Campbell, KY, will be conducting a mock mission staged out of Freeman Field sometime between September 3<sup>rd</sup> and the 7<sup>th</sup>. The actual date is dependent on weather, and other factors. During this one-day event there will be about 6 helicopters and a C-130 here at SER, and at least one runway, and perhaps both, will be shut down.

### **Astronomical Society is Back!**

The Astronomical Society of Louisville had tried to hold a "Star Party" at the airport back in April, but the weather didn't cooperate for either their primary date or the rain date. They are now going to try once more this year, on Thursday, September 26<sup>th</sup> (no rain date). The public will be invited to come out and view the heavens through telescopes set up along Taxiway C. If the weather is clear the airport will be closed from approximately 5:00PM until midnight on 9/26.

### **Spring Fuel Tank Cleaning**

Airport Manager Don Furlow told the board that the fuel farm would be shut down in the spring so that the bulk tanks for both 100LL and Jet-A can be cleaned. Cleaning is necessary every 10 years. It involves pumping out both tanks (fuel goes into transport tankers) and humans have to climb

down into the tanks and scrub the insides. This work will take 3 or 4 days, during which time fuel will not be available at Seymour. The exact dates have not yet been determined.

### **Indy Air Hogs Fly-In at SER**

A group of powered paraglider enthusiasts known as the Indy Air Hogs have asked the airport authority if they can hold a 4-day event at Seymour, 9/26 through 9/29. For the uninitiated, a PPG is a foot-launched (they run!) paraglider powered by an engine worn on the back of the pilot. They are true ultra-lights, so no pilot certificate is required. Since the machines can't handle very much wind they fly only in the early morning and in the evening before dark. Even though PPGs don't need a runway per se, they would use the grass strips because of the open approach and departure lanes. Operations on our paved runways would not be affected. However, it appears to your editor that the radio-controlled model airplanes would have to stand down during the PPG event.

This event has been held at the Scottsburg airport for the past 10 years or so. It was effectively rained out in 2018. Some sort of problems arose with Scottsburg, and now IAH is seeking a new venue. The airport authority is withholding final approval for the event, pending Don Furlow talking to some other airport operators where such events have been held in the past.

### **Trees & Brush on Abandoned Runways**

It appears that the piles of tree branches, brush and wood chips out on the old abandoned north-south and east-west WW-II runways will have to be removed. These piles run some 900 feet along the old concrete, and the piles reach 15 feet in height. Right now, this is just in the planning stage. More later after it is determined if/when the removal will take place, and whether or not it will necessitate closing runway 14-32 for some period of time.

### **Bowman VOR Shut Down**

Your editor heard from the EAA chapter at Clark Regional that the VOR (BQM) on the field at Louisville-Bowman Field was shut down, permanently (decommissioned), on August 16<sup>th</sup>. A call to Flight Service confirms that this is true. BQM is gone. But you GPS still knows where it is (was).

### **Museum Archives**

#### **News of the Freeman Army Airfield Museum**



*The Freeman Army Airfield Museum is a completely separate entity from the Freeman Field Flying Association. Some of our board members (L. Bothe & B. Grant) overlap. The FFFA on occasion supports the museum with gifts of money for worthy projects.*

FMI [www.freemanarmyairfieldmuseum.org](http://www.freemanarmyairfieldmuseum.org).

The museum has completed several projects over the summer. They include:

- The fire truck fuel system overhaul is completed. It was returned to its stock, 1942, configuration. Everything from the tank to the carburetor was overhauled or replaced. Even the gas gauge works now. No more trips home on flat-bed trucks.
- During the fuel system overhaul a lot of bad wiring (insulation falling off) was discovered. That bad wiring has been replaced, and the wiring that was not replaced has been inspected and found to be sound. Museum President Joe Clegg did most of the work on both the fuel system and the electrical repairs.
- Treasurer Dan Kiel and Curator Larry Bothe have spent many hours going through documents, photographs and other items that had accumulated in our library over time. These things are now sorted by subject matter and placed into file folders. Some photos, from outside the WW-II era, have been sent to other museums. Dan and Larry are continuing this clean-up effort with other storage areas.

- The museum welcomes two new volunteers. Steve Morse, who has an abiding interest in flight simulators, has taken over the operation and maintenance of all the museum's computers. He is adding flight simulation software, and making our electronic simulator more useful for introducing museum guests to flight. Nathan Simpson has joined the museum group and is taking care of buildings & grounds. We are fortunate that the airport authority mows the lawn for us. However, trimming bushes, spraying weeds, picking up trash, etc., is on us. Nathan is taking care of those things. He is also assisting Steve with the flight simulator, as a test subject. Nathan has just started taking flying lessons and he is testing simulator changes initiated by Steve. We heartily welcome Steve and Nathan. We sure do need the help.

### **Museum Seeks Additional Volunteer – Library Coordinator**

The museum needs another specialized volunteer. We need someone to be responsible for the museum's library. The library consists of about 300 books, approximately 100 copies of Life magazine from the WW-II years, a handful of other magazines, and a few DVDs and CDs. Two years ago, as part of an Eagle Scout community service project, we obtained library management software and entered all of our books and magazines into a library database. At that time, we also got rid of all the books we didn't want (didn't pertain to WW-II). The big project work is done. What we need now is a person to maintain that system.

Maintaining the system primarily means entering newly acquired books into the library database, creating and applying a location label to the spine of the book, and

placing it in the proper location in the library. The shelves are already marked with a locator system. Once in a while the library software has to be updated (it tells you), and then a click on *Update* gets the job done.

All of this can easily be done in a few hours each month, say a visit of 2 hours, twice a month. We will provide training, a key to the building, and an alarm code. If you like history, have modest computer skills, and would like to help out the Freeman Army Airfield museum team, please contact Larry Bothe, 812-521-7400, [LBothe@comcast.net](mailto:LBothe@comcast.net). Thank you.

### **Lightspeed Zulu-3 Headset for Sale**

Brand new, in the box, never unpacked, never on anybody's head. Full 7-year warrantee.

The regular price for these headsets is \$850. I'll sell this one for \$600. If you're interested call Larry Bothe at 812-521-7400, or email me at [LBothe@comcast.net](mailto:LBothe@comcast.net). I use one of these headsets every day that I fly, and I love it. The active noise cancelling is really good, and it is super comfortable to wear. For the full specs and all the features about this headset, go to [http://www.mypilotstore.com/my\\_pilotstore/sep/11329](http://www.mypilotstore.com/my_pilotstore/sep/11329).

### **Member Accomplishments**

**Monte Gullion** passed his IFR checkride on July 15<sup>th</sup>. He was examined by Denny Green up at Muncie, and Monte filed an IFR flight plan for his trip home. Wife **Mindy** isn't far behind her husband and hopes to take her checkride sometime this fall. Congratulations Monte. Welcome to the real world of aircraft utility.

**Helmut Weislein** bought a plane! It is a **Savage Outback** experimental; a very modernized Super Cub clone. The airplane is almost new. It has a 180 hp engine, composite climb prop, glass cockpit, vortex generators, oversize tires, and a 2-axis

autopilot. Here are a couple of pictures Helmut sent along.



## **Glider Operations Recap** July and August 2019

By Bob Walker (OB1)

July through August has been one of the busiest times for LSC (Louisville Soaring Club). The combination of long days, hot temperatures, mild winds and the dry ground has made for exceptionally good soaring weather at Seymour. During this time, the club grew by a few members, soloed students, and even had some members accomplish notable duration and distance flights. They received formal recognition by the FAI (FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE), an international organization that sponsors competitions and awards records.

The club had a total of 90 operations in July and is on target for a similar number in August. Each operation is a carefully planned event with safety and minimal impact to the powered aircraft operations as the primary

focus. As noted in the last newsletter, all club and private gliders are equipped with radios. Prior to positioning a glider on the runway, the pilot or ground crew will check for traffic and make a radio call on 122.8. The standardization of the radio communication procedures for glider and tow plane during positioning, takeoff and landing helps ensure the safe and efficient integration of gliders and powered aircraft.

During July, the club congratulated two students, Tom Melton and Robert Pumphrey, for their first solo in a glider. In addition, Steve Hayes earned his FAI Silver Badge by staying aloft for 5-hour and 47-minute flight! He also flew from Seymour to Greensburg, Indiana (57 kilometers). The Silver Badge is a personal goal for many glider pilots. It requires careful route planning, weather analysis and the skills to stay aloft.

LSC has a dedicated group of experienced tow pilots that fly the Bellanca Scout. The tow plane monitors 122.8 and routinely makes radio calls during takeoff and landing. For powered aircraft departing or arriving Seymour, the tow plane may be a good source for an update on glider traffic.

LSC is committed to ensuring safe operations at Seymour. Accurate and timely radio communication enhances safety and ensures cooperative use of the airspace. If you have suggestions for improving the operation, LSC can be contacted through the home page, <http://www.soarky.org>. You're also welcome to visit the club during the weekend operation at the hangar or midfield Runway 14/32.

## **Airliner Performance**

By Adam Springmeyer

Hello FFFA Members, and welcome to August of 2019. You look back on it, and wonder where the entire year went. The year just has just seems to be gone in a blink of an eye.

My seniority continues to climb here in Pittsburgh, and my trips are getting better. I still cannot hold weekends off, but am getting

mostly what I bid for. I am now flying with more senior First Officers. We are even seeing First Officers able to upgrade (to Captain) starting after 1½ years with our company.

For this month's article, we had a request from a reader. Our reader wanted to know how exactly we calculate performance in the Airline World. The aircraft I currently fly is the Embraer ERJ-170-100 and the -200. For our example we will use that. To get started, we use the same factors that all pilots use.

1. Aircraft Weight & Crew – In our airliner we have 3 different sections where people are seated. Each section is different based on our Code Share Partner, and if we are flying a -100 or a -200 model. This also changes if we are flying as a reposition flight, or maintenance flight. We may or may not have our Flight Attendants with us, or we may have someone occupying the jump seat. This changes the weight and CG.

2. Temperature

3. Wind – This really only applies when we are landing. If the wind is gusting or is a steady state higher than 10 knots, we will change our approach speed by a few knots to compensate.

4. Runway Condition (Dry, Wet, Standing Snow, etc.) – Condition is expressed as a Runway Condition Code (RCC) of 666, 555, 444, 333, 222, 111, or any combination thereof. One digit is for each 1/3 of the runway. The lower the number the more braking action is needed, and more runway needed for both takeoff and landing.

5. Runway Length

6. Known / Additional Obstacles – Some of the runways where we operate are next to the water. For example, in Boston and Philadelphia they have cargo ships that go up and down the river near the airport to their respective piers. These ships can reach over 75 feet in height, and are close to the runway. We use different codes to alert the computer that additional performance is required to clear those obstacles.

7. Airport Field Elevation

We take all this information and plug it into our ACARS (Aircraft Communications Addressing and Reporting System) computer. When we type in all the factors and press the send button, and get a result within 30 seconds. This information is sent to a 3<sup>rd</sup> party contractor, and the results come back to us with the following information:

1. Aircraft Zero Fuel Weight – This is the weight that has all passengers, baggage, and additional weight that is not already factored into the Aircraft Basic Operating Weight.

2. Flap Setting – The flaps in our aircraft are 1, 2, and 4. Each setting is generally based on runway length. The shorter the runway, the more flaps we use. Our normal setting is 2. This gives us a Slat setting of around 7 degrees and Flap setting of around 10 degrees.

3. Aircraft speeds – Our speeds are broken down into V1, VR, V2, VAC, and VFS. We will describe these speeds in more detail next month. Each speed has a meaning.

4. Flex Temperature – We tell the engines the outside air temperature, and what temperature we want them to think it is. This higher temperature is called flexing the takeoff power. The engines can only operate up to 920C. If we tell the engine that it is 44C instead of 20C, the FADEC (Full Authority Digital Electronic Control) will tell the FMU (Fuel Metering Unit) to provide less fuel to the engine. Less power means the components of the engine are not used to the max limit, and therefore saves us time on the engine.

5. Aircraft Center of Gravity – We have to know where our Center of Gravity is for each flight. We try to have as far aft a CG as we can get, within published limits. This allows us to fly faster. Our aircraft is actually tail heavy, and if we have too many passengers in the back of the aircraft, we move them forward. (Ed. note: I used to regularly get moved to 1<sup>st</sup> Class coming out of Fresno, CA (FAT) for that reason.)

6. Single Engine Procedures – God Forbid we were to lose an engine; some airports have a special procedure to fly after an aircraft gets

airborne. For example, if we are using Runway 25 in Denver (DEN), and we lose an engine, we turn right to a heading of 350. This is to avoid the mountain range to the west of the airport, and it is to alert ATC so they can physically see a problem. The aircraft would appear to be flying against the arrivals. This will cause ATC to move others out of the way.

Here's an example of what ACARS data looks like on-screen:



I would like to thank each and every member for reading these articles. I would also like to thank all the members who sent in requests for different topics. Finally, I would like to thank the editor, Mr. Larry Bothe, for allowing me to give you some pointers, feedback, and to share my experiences with you each month. If you have any questions that you would like to be answered, please feel free to email me at [adam.springmeyer@gmail.com](mailto:adam.springmeyer@gmail.com). Fly Safe, and Blue Skies.

## High Flight, with FAA Supplement (Humor)

Acknowledgement: From EAA 729 July, 2019 newsletter. Source provided by editor, Mike Foushee.

Oh, I have slipped the surly bonds of earth(1),  
 And danced(2) the skies on laughter silvered wings;  
 Sunward I've climbed(3) and joined the

tumbling mirth(4)

Of sun-split clouds(5) and done a hundred things(6)

You have not dreamed of — Wheeled and soared and swung(7)

High in the sunlit silence(8). Hov'ring there(9)

I've chased the shouting wind(10) along and flung(11)

My eager craft through footless halls of air. Up, up the long delirious(12), burning blue

I've topped the wind-swept heights(13) with easy grace,

Where never lark, or even eagle(14) flew;

And, while with silent, lifting mind I've trod The high untrespassed sanctity of space(15),

Put out my hand(16), and touched the face of God.

NOTE:

1. Pilots must ensure that all surly bonds have been slipped entirely before aircraft taxi or flight is attempted.
2. During periods of severe sky dancing, crew and passengers must keep seatbelts fastened. Crew should wear shoulder belts as provided.
3. Sunward climbs must not exceed the maximum permitted aircraft ceiling.
4. Passenger aircraft are prohibited from joining the tumbling mirth.
5. Pilots flying through sun-split clouds under VFR conditions must comply with all applicable minimum clearances.
6. Do not perform these hundred things in front of Federal Aviation Administration inspectors.
7. Wheeling, soaring, and swinging will not be attempted except in aircraft rated for such activities and within utility class weight limits.
8. Be advised that sunlit silence will occur only when a major engine malfunction has occurred.
9. "Hov'ring there" will constitute a highly reliable signal that a flight emergency is imminent.
10. Forecasts of shouting winds are available from the local FSS. Encounters

with unexpected shouting winds should be reported by pilots.

11. Pilots flinging eager craft through footless halls of air are reminded that they alone are responsible for maintaining separation from other eager craft.

12. Should any crewmember or passenger experience delirium while in the burning blue, submit an irregularity report upon flight termination.

13. Windswept heights will be topped by a minimum of 1,000 feet to maintain VFR minimum separations.

14. Aircraft engine ingestion of, or impact with, larks or eagles should be reported to the FAA and the appropriate aircraft maintenance facility.

15. Aircraft operating in the high untrespassed sanctity of space must remain in IFR flight regardless of meteorological conditions and visibility.

16. Pilots and passengers are reminded that opening doors or windows in order to touch the face of God may result in loss of cabin pressure.

### **Glider Operation Information**

The Louisville Soaring Club would like aircraft flying at SER to know that the gliders almost always operate off runways 14/32. However, that does not mean that the wind favors 14 or 32. The gliders and tow plane use 14/32 because it is convenient to where the gliders are stored. ... All the gliders have radios. When approaching the field, especially on weekends, call addressing *Seymour Glider Operations* and ask where the gliders are; they will tell you. It actually works best, when glider operations are in progress, for power planes to use 5 or 23. FMI [www.soarky.org](http://www.soarky.org), or call President Bob Walker at 502-314-3519.

### **FFFA Officers - Contacts**

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### **Ask an Instructor/Airline Pilot**

Do you have a question about some phase of aviation? It could be about pilot certification, logging flight time, FAR's, how airlines do things, instrument flight, or anything else. Send a message to Adam Springmeyer at [adam.springmeyer@gmail.com](mailto:adam.springmeyer@gmail.com) and receive a personal reply directly in your e-mail.

### **Local Event Calendar at a Glance**

Aug 24, EAA-114 fly-in, Lawrence, IL LWV

Aug 31\*, Fly-in, Red Stewart Field, 40I

Sep 2-8, *Triple Tree fly-in, Woodruff, SC SC00*

Sep 5-7, Midwest LSA Expo, Mt. Vernon, IL

Sep 7-8, Greencastle Airport Days, GPC

Sep 18 (Wed. evening, 4-8 PM) Columbus, IN

Birds 'n Brews (replaces 2019 Airport Day).

Canadian Snowbirds will perform. Don't miss it!

Sep 21, French Lick fish fry, 10 to 1. Then go to

North Vernon for the air show. Arr by 1 PM.

Sep 21\*, North Vernon Airport Awareness Day

Sep 28\*, Madison Air Show, IMS

Oct 5-6\*, Bowman Field fly-in & airshow, LOU

\*An asterisk means Cliff Robinson will be performing an air show at that event. If you want to see world-class aerobatics with no admission charge, attend one or more of these events.

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**Freeman Field Flying Association** meets the 2<sup>nd</sup> Thursday of each month, 7:00 PM, at the Freeman Army Airfield Museum. No meeting in July. Christmas dinner in December.

**Airport Authority** meets the 3<sup>rd</sup> Monday of each month at 7:15 PM, terminal building conference room.

**Museum Board** meets the 3<sup>rd</sup> Tuesday of each month, 6:15 PM, main museum building, map room.

**Join FFFA:** Dues are \$10 per year. Send a check, payable to FFFA, to Larry Bothe, 1082 Governors Ln, Seymour, IN 47274-1135. Include e-mail address and phone number. ½ price after the 4<sup>th</sup> of July.

**Freeman Flash** issues going back to 1999 are available if you contact the editor.

### **Sell – Buy**

Have something you want to sell or buy? FFFA members get a free ad. Send an e-mail to [LBothe@comcast.net](mailto:LBothe@comcast.net) to place an ad.

### **Cherry Hill Aviation**

Aircraft Maintenance & Annual Inspections

Tube & fabric work a specialty

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**Lance Bartels 812-322-6762**

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Cliff Robinson, Madison, IN 812-701-9990  
[cliffrobinsonaerobatics.com](http://cliffrobinsonaerobatics.com)

**Eagle Avionics**

Radio repair and installation, shop at BAK  
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Contact Eagle Avionics for your ADS-B solution.  
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Call Andy Zeigler, 812-344-0468

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