

Newsletter of Chapter 75

Ouad-Cities of Illinois and Iowa. USA

February 2017

THE EXPERIMENTAL AIRCRAFT ASSOCIATION

From The Desk of the President



I'm back from my flying vacation. I call it that because that's what I enjoy. I like visiting my friends and hanging with them when I get there. And I really love hanging with them in 80 degree weather in January. Having said that, after three days I'm ready to fly off on the next leg of the journey. I've always been like that just ask Julie. After lying around a few days it's time to see some new sights.

Let's talk flying. I'm back from a 2700 mile trip. I took off at 10:00 Wed. morning to give the weather time to clear. I climbed to 3500' in an effort to stay below clouds. It was 30 degrees when I took off, passing into MO at 3500', my OAT gauge said 70 degrees. No wonder Midwest weather is messed up. My dilemma, I have to fly an overcast sky from top of Florida to Chicago. Too far to fly without needing to descend through clouds for gas. My goal was to narrow this band of clouds. I headed South, southwest to Springfield, MO. Headwind was 50 knots and bumpy, I'm burning 13 gallons per hr and traveling 145 kt per hr. Two hrs. later I landed in Salem Mem (K33) for gas. It looked like the clouds were scattered over the Gulf so that was my out if I couldn't get to clear air before needing gas. I took off from

Salem and climbed through a hole to 9,500'. At that altitude the wind was from my right so I only had a 10 kt headwind I was now traveling 190 kts/hr burning 9.5 gallons per hr. My next stop was Quincy Florida, just north of Tallahassee. Filled up with fuel for my last 2 hrs. to Fort Meyers Page airport. The guy putting gas in his plane in front of me was evidently retired cause time meant nothing to him. I wanted to get to FMY before dark, but you can't push some people. I even asked if he needed help pushing the plane back. After leaving Quincy I contacted Tallahassee approach for flight following as I wanted help getting through Tampa airspace. My direct route was going to take me 50 miles into the Gulf. I chickened out and followed the coast. By the time I got to FMY it was dark but still pretty.

After three days visiting my friend Rob I headed for X51, Homestead, I used flight following again. If I went down in the Everglades I wanted someone to look for me. Forecast was partly cloudy, as with the tropics I had to drop to 3000' to get under some showers. Halfway to Homestead I flew over Dade County Airport, 10,000' long with no buildings, no idea what for but it would have been my favorite place if my engine quit. After 3 days with my brother in law, it was time to go home. Once again Florida sunshine, thunderstorms in Texas and showers between me and home. I filled up with gas in Headland (0J6). Nice people there by the way. Then over the top to Union City, TN where clouds opened up for landing. Filled up with fuel and checked with FSS. No way I can get home VFR so I flew North to Paducah, KT and spent the night. Next morning I waited till DVN went VFR and headed north Over top till Galesburg where I went under the 1,000' ceiling to get home. I used my GPS and Foreflight to avoid tall towers, called MLI to travel though there space to DVN. No go, MLI just went IFR, DVN is still VFR. I stayed out of Class C airspace and made it home to DVN. When I got to DVN the clouds were breaking up and I could have flown over top and come down to land VFR. It was 1:00 Wednesday.

(Continued on page 2)

Next Meeting - Saturday, February 11th, 7PM - Lancair Panel Upgrade

Deere Wiman Carriage House — 817 11th Avenue Moline. Illinois (click for a Man)

February 11th Chapter Meeting

The February Chapter meeting will be held on **Saturday**, **February 11th at 7PM**. It will be held at the Deere-Wiman Carriage House, located at 817 11th Avenue in Moline, IL.

Jerry Coussens will have a presentation on the panel upgrade he has been pursuing this past year in his Lancair. Some things went right, some things did not go quite right.

Bring a new member!! Please ATTEND!!

From The Desk of the President

(Continued from page 1)

Moral of the story is, this would have been an easy IFR trip, instead it was a stressful trip because I was VFR. Now that I know IFR it was frustrating to sit in Paducah when I knew it was an easy IFR trip to DVN. This is the last long trip I will take till I get my IFR rating.

Thank you Ron and the rest of the EAA members for taking over while I was gone. I have someone taking over for me at the Home Show so I'll be at Bobs place next Saturday. See yal there. (See I picked up some Southern talk). Jerry.

January Board of Directors Meeting Minutes

CALL TO ORDER: The meeting was called to order by Chapter VP Ron Franck at 1800.

MEMBERS PRESENT: Ron Franck, Ron Erhecke, Wayne Sapp, Dave Jacobsen, John Riedel, Nick Anagnos.

THOSE NOT PRESENT: Jerry Coussens, Ed Leahy.

OTHERS PRESENT: Tom Shelton

TREASURERS REPORT: The treasurer's report was read by Ron Erhecke. A motion to accept the treasurer's report was made by Ron Erhecke and was seconded by Dave Jacobsen. Approval by the board was unanimous.

APPROVAL OF MEETING MINUTES: A mo-

tion to approve the minutes as published in the last newsletter was made by Dave Jacobson and was seconded by Ron Erhecke. Approval of the board was unanimous.

OLD BUSINESS: Discussion continued concerning the Young Eagles liability problem (or the lack thereof.) Prior to the meeting Pres. Jerry Coussens suggested contacting Oshkosh again for the latest information and clarification. Oshkosh has declined to provide a copy of their insurance policy. This leaves the tentative June 24-25 Young eagle rally up in the air. It was suggested that members be polled to compile a list of concerns to forward. Also discussed was the possibility of acquiring our own insurance for the members of the board. The discussion was subsequently tabled.

NEW BUSINESS: Changes at the repair barn were discussed, including the centerline for the new approach from the runway to the repair barn, the installation of a new DSL comm. Line, a form for logging phone calls, replacing the round table in the office with something more space conscience, and what to do with the folding chairs that are going to be stored inside the tool barn.

Also discussed, contacting Mike Whalen and requesting a meeting program on the new Honda jet.

It was decided that for the 55th Anniversary party, money that is left over from donations will be returned to the repair barn account.

Keith Williams has been asked to audit chapter 75's books.

A motion to adjourn the meeting was made by Ron Franck and was seconded by Wayne Sapp. The meeting was adjourned at 1845.

These minutes respectively submitted by Wayne Sapp.

January General Meeting Minutes

CALL TO ORDER: The meeting was called to order at 1900 by Chapter VP Ron Franck.

VISITORS AND NEW MEMBERS: None

TREASURERS REPORT: The treasurer's report was read by Nick Anagnos. The treasurer's report was approved at the Board of Director's meeting.

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January General Meeting Minutes

(Continued from page 2)

APPROVAL OF MEETING MINUTES: The minutes of the last meeting as published in the last newsletter were approved at the Board of Directors meeting.

TOOL LIBRARY: Nothing to report.

TECH COUNSELOR REPORT: Nothing to report.

FLIGHT ADVISOR REPORT: Nothing to report.

REPAIR BARN: Discussed were the centerline that is being painted on the new approach that has been installed from the runway to the repair barn, and that some new folding chairs were being stored in the barn and will have to be dealt with on arrive prior to Airventure

YOUNG EAGLES: Members were informed of the board decision to approve funding the two young men who had applied this year. They are Ray Ambrose of Davenport and Jake Hyde of Macomb.

PROGRAM COORDINATOR: Nothing to report.

AIR ACADEMY ADVISOR: Discussion concluded with the approval of the two attendees this summer.

MEMBERSHIP COORDINATOR: Nothing to report.

ACTIVITIES / **FLY-IN/OUT COORDIATOR:** Nothing to report.

NEWSLETTER EDITOR: Marty Santic asked again for relevant articles to be included in the newsletter.

WEB EDITOR: Nothing to report.

IMC CLUB: Paul Fisher and Ron Franke report that the IMC club is being well attended, with 23 people participating in January. New members are encouraged to attend. Due to a conflict at the airport, the next meeting will be held in Lindquist Ford's conference room.

OLD BUSINESS: Old business discussion again involved the questions involved with liability concerns with the Young Eagle program. Membership at

large is still interested in participating, but the liability issue still has some unanswered questions. Bob Thomas has agreed to do further research on the matter

NEW BUSINESS: See BOD Notes

PROGRESS REPORTS / GENERAL DISCUSSION / INFORMATION: None

A motion to adjourn the meeting was made by Ron Franck and was seconded by Nick Anagnos. The meeting was adjourned at 19:45.

These minutes respectively submitted by Wayne Sapp.

IMC Club - NEW Meeting Location

(from Paul Fisher)

IMC Club update: Carver Aero has started a new ground school on Tuesday nights, so we needed to find a new place to meet. Craig Miller graciously offered to let us use the conference room at Lindquist Ford in Bettendorf (Thanks Craig!).

So our meeting location has changed, but it is still the first Tuesday of the month at 18:00 local. Hopefully this isn't too inconvenient for anyone, but having Carver get new pilots trained is important too! The new location is Lindquist Ford, 3950 Middle Rd., Bettendorf, IA. See you all there!

Upcoming On-Line Course Unmanned Aircraft Systems (from

Christine Visco)

Here is an upcoming class online. Pilots may want to understand unmanned aircraft better so that they can be defensive pilots.

Small Unmanned Aircraft Systems (sUAS) - Key Concepts for New Users

FREE class online through Embry-Riddle Aeronautical University, Feb 6-19

Don't FORGET Your 2017 Chapter Dues - If You Have Not Sent Your \$10 - PLEASE Do it TODAY! - See the Last Page

From the January Edition of the 1st Saturday Coffee

As a change of pace, the January coffee was hosted by Rick and Shari Meyer at their beautiful cabin near Dixon, IA. There were a lot of donuts left over because Shari did a fabulous job with all of the brunch items. If you missed it, bet you are sorry now!















From the January 1st Saturday Coffee













Book Report - Skyfaring, A Journey With a Pilot (from Richard Lowe)

Recently, a friend gave me a copy of a book titled Skyfaring - A Journey with a pilot. The author is Mark Vanhoenacker. Published in 2015 by Random House in paper back, it is a different kind of aviation book. Mark is a B-747 pilot for British Airways based in London.

What is unique about him is that he is from the U.S. His father was a missionary who was raised in Belgium. They lived in Europe, Africa, South America and eventually they settled in the New England area. As a result, Mark spoke several languages and was familiar with international travel from the time he was a young boy. He studied in Europe and Japan and had a growing career with an international consulting firm. He always had the bug to learn to fly, and when opportunity presented itself, he packed everything in, got enrolled in an extended flight training program first in the U.K and later in Arizona where he eventually qualified as a first officer on an A-320, flying routes on the European continent.

After a few years, he moved to what he really wanted, a seat on what he calls the "Long Hauls". Airline pilots in the U.S. tend to think of long flights as Washington to Los Angeles or Seattle to Miami. For him, a routine flight is London to Sydney, London to Rio, London to Tokyo. Flying across so many international borders and into so many exotic countries presents problems we never imagine, but it is done routinely by British Airways.

His story is fascinating.

Mark is a master of mixing the technical side of flying wide-body aircraft with the romance of the travel to so many destinations. His intimate knowledge of world history, current events and customs of the various cultures he visits on a routine basis allows him to tell a great story. He says that too many travelers today do not appreciate the gift of flight. They board the plane, pull the shade, turn on the electronic devices and do what ever they can to kill the time to the destination. Many of his trips are 12-14 hours long, and would give the traveler an opportunity to experience and dwell on what is outside the airplane.

With many years of flying, he still is fascinated by what he sees outside the cockpit. He says, unfortunately, the pilots do not mention the presence of the Northern Lights which are often visible on an Atlantic night crossing east bound. Many of the passengers would get mad at being awoke by such an an-

nouncement from the cockpit. His description of how they plan and conduct the long hauls is of interest to any pilot. The factors which go into load planning, fuel burn, crew duties are well explained in layman's terms so that even the non-aviator will enjoy and understand it. His continued description of what life is like for an international airline crew opens the door to the secrets which many of us can only imagine.

The book was well reviewed by the New Your Times, The San Francisco Chronicle, The Atlantic and the Economist.

Engine Out At Night (from Ron Franck - Reprinted with Permission)

An engine out at night is something none of us want to face. The only sure bet is an airport, but even if you have an airport within gliding distance, making the landing still takes plenty of skill and



a little luck.

Naturally, we want to stay away from the lighted areas as those are most likely populated. Some people suggest you go for a black area but the problem with that is you cannot see obstacles.

There are those who like to suggest highways or freeways. Yes, these are sometimes lighted but they also have cars on them. Further, next time you drive on a freeway, look at all the wires, signs and ditches you see. So even if you can miss the cars, there is still a lot of stuff to hit.

In certain areas in the winter, frozen lakes are a bet. We're talking thick ice here. At least there are no obstacles to worry about. Of course, there can be issues with snowdrifts and crusted snow but at least one should be able to make a controlled touchdown.

It is extremely important to maintain situational awareness when flying at night and to consider your options before departing. You should consider altering your course to remain near airports.

A few helpful tips from others;

(Continued on page 7)

Engine Out At Night (Cont. - Reprinted with Permission)

(Continued from page 6)

Here's an interesting technique to use for an engine out at night, or whenever over obstructed terrain. If you feel that a clear TDZ is unavailable, transition from best glide to power off stall speed, then pitch down for best glide, and repeat. Slow the horizontal speed of the airplane. When you impact trees, ground, whatever you are utilizing the airframe and landing gear to absorb the impact versus a full head on impact.

One way to increase safety at night... Altitude! That is, increase the altitude below you to increase your options. The rules state to fly at an altitude in which if there was an engine out you can land without undue injury to persons or property. What that height is, is determined by the PIC. If you cause undue injury to persons or property day or night, you were not high enough (within reason).

Flying at night is actually beautiful, calm, and safer in some ways. There aren't many "anyone in the pattern please advise" flyers out during that time so the risk of a mid-air is much less. With GPS, iPads, etc., it has never been easier to keep your route close to airports. Light them up along the way for fun with the radio. Get some instrument training and fly into a cloud for a few hours to learn how to keep it blue side up (with your CFII of course on a plan). Foggles aren't remotely the same.

What about carrying an emergency parachute? I wear one when flying over the Sierras during the day. I am constantly looking for places to land if an engine failure occurs. But sometimes there is nothing but dense trees and rock cliffs. If those are my only options I am going to bail out. Consider the same option if nothing reasonable is available at night. Just try to point the plane away from the lights. (I'm not suggesting this, just offering it as a last ditch option!)

For weekly pilot tips like this, visit www.pilotworkshop.com

EAA Statement ON FAA Release of THIRD-CLASS MEDICAL REFORM RULE

FAA's BasicMed will take effect on May 1, 2017

EAA AVIATION CENTER, OSHKOSH, Wisconsin (January 10, 2017) — Years of effort by EAA and

AOPA culminated on Tuesday morning as the FAA announced regulations that will implement the aeromedical reform law passed last July. The regulations will be published Wednesday as a final rule, to take effect May 1, 2017. According to the FAA, no changes have been made to the language in the law.

Because it is final, the rule – named "BasicMed" by the FAA – will not go out for a typical public comment period. The FAA also said it would publish an advisory circular describing the implementation of the rule later this week.

"This is the moment we've been waiting for, as the provisions of aeromedical reform become something that pilots can now use," said Jack J. Pelton, EAA CEO/chairman. "EAA and AOPA worked to make this a reality through legislation in July, and since then the most common question from our members has been, 'When will the rule come out?' We now have the text and will work to educate members, pilots, and physicians about the specifics in the regulation."

Tuesday's announcement finalized the highly anticipated measure that was signed into law last July as part of an FAA funding bill. That was the ultimate success of a long effort by EAA and AOPA to bring significant aeromedical reform to pilots flying recreationally and eliminate the time and expense burdens on those holding third-class medical certificates.

The law guaranteed that pilots holding a valid thirdclass medical certificate issued in the 10 years before the reform was enacted will be eligible to fly under the new rules. New pilots and pilots whose most recent medical expired more than 10 years prior to July 2016 will be required to get a one-time third-class exam from an FAA-designated AME.

The FAA was required to implement the law within 180 days of its signing, or this Thursday (January 12). Since Airventure 2016, FAA senior leadership has been assuring EAA that the 180-day deadline would be met. Despite the release of the regulations as a final rule, EAA will be reviewing the language carefully to ensure it fully reflects the language and intent of the law.

EAA has updated its Q&A and will continue to update them to provide the latest information. EAA is also working with its aeromedical and legal advisory councils to provide resources that will help members and their personal doctors understand the provisions of the new regulations.

http://www.eaa.org/en/eaa/eaa-news-and-aviation-news/12-09-2015-pbor-faq

Kyle Voltz Has a New Project (from Paul Fisher)

I got this picture from Kyle Voltz - his new airplane project that he just bought! He apparently can rent space in one of EAA's work spaces, so he's on his way!!

A Pilot's Perspective of ADS-B

Thought this was interesting. A pilot's thoughts regarding ADS-B.

We had an interesting experience yesterday on a trip from the Birmingham area south to our home along the Gulf Coast of Alabama. We were about halfway when the iFly 720 alerted me to traffic 1 o'clock 12 miles +200 feet relative to us. We were cruising at 4500 feet, the proper VFR altitude for our heading. Thinking he was on his way up or down, we observed him for a minute. With the target now only 6 miles out and the +200 ft. relative altitude not changing it was time to disengage the autopilot and descend. I dropped 400 feet as the Aircraft passed overhead right where the Navworx ADSB said it would be. Climbing back to 4500 feet and with "George" again flying, we were on our merry way.

My Thoughts:

- 1. He was at the wrong altitude... didn't matter, we'd all be just as dead so I was happy to get out of the way.
- 2. I estimated our closer rate at 380 mph.... 6.3 miles a minute.... and once he's close enough to maybe notice (small nearly head on profile), say 2 miles... We would have only 19 seconds before coming together. I wonder with the very little relative motion, (coming from my 1 o'clock), if we'd seen him before getting uncomfortably close
- 3. The Navworx ADSB possibly kept us from being on the 10 pm news. It turned a potentially dangerous situation into a non-event.
- 4. I usually use flight following which I wasn't this flight. That would have added another layer of safety.

LOVE this ADSB stuff and encourage others to "Get

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Monmouth Airport (from James Haynes)

This happens to have been taken from my book, Flying Field which is a history of Monmouth Airport that I wrote several years ago. (Out of print and sold out).

This is an excerpt but not word for word. The scene is shortly after WW II when the G I Bill allowed veterans to enroll in flight training from an approved flight school under the terms of the GI Bill. All a veteran had to was to declare that a career as a professional pilot was the goal. It was a loosely run program. At Monmouth Airport Martin Airways was started shortly after the war by a Monmouth car dealer, Hy Martin and he was quick to take advantage of the program. He established a sub-dealership with Elliot at Davenport and invested in Piper Aircraft and Stinsons. and Aeronca Champs. the program flourished under he leadership of John Louck. One of the instructors, who by the way soloed me was Finley Downes. I interviewed him when I was researching my book and used several of his stories of the goings on during that time of the heyday of the GI program at Monmouth. The following is but one such happening but not to hilarious.

She was the wife of a local farmer who, although not in the GI program had caught the flying fever. She decided that it would be a good idea that she learned to fly also because he had a heart condition and she looked on this as a safety factor. She had soloed and on a nice sunny Sunday afternoon was practicing take -offs and landings. In those days lots of spectators came to the old grass field airport to just watch this as there were always several planes in the pattern and many treated his as an airshow.

Also in those days the main landing runway was north and south. At the south end was the city cemetery and a row of trees at the edge of the cemetery thus the ap-

Monmouth Airport (cont.)

proach was somewhat challenging as the base leg approach was over the city.

Everything was routine until the lady in question turned on final and when she routinely attempted to "clear" the engine the engine quit. Fortunately she did not panic. The Aeronca Champ routinely glided downward and landed on one of the grass drives in the cemetery. The damage was limited to a slightly bent right gear. The spectators poured out of the parking lot and made haste to the cemetery only to find the pilot calmly sitting in the plane. Pilots, her instructor heaped congratulations on her and marveled at the superb job of landing in a cemetery.

When this writer interviewed her, the only regret she expressed was, "I landed on the police chiefs grave."

I wonder if Bob Hoover could have done as well?

Burned Valve Damage - Borescope It (from Cy Galley)

Burned valve damage is typically visible through a borescope between 50 and 150 hours prior to failure. A compression test is far less reliable, according to Busch, giving too many false positives. The borescope is the gold standard for determining impending valve failure-and the engine monitor is the early warning system that says when it's time to do the borescope exam.

The picture that a failing exhaust valve paints on the EGT graph of engine monitor data is a slow, perfectly rhythmic oscillation of the EGT for the affected cylinder. Busch said, "The pattern is easily distinguishable from EGT data 'noise.' There isn't anything else in the engine that can oscillate that slowly. Normally the amplitude is pretty small. We normally look for an oscillation of 30-60 degrees from peak to peak. When we see it, we know the valve is failing."

Busch noted that few A & P mechanics have been trained in using a borescope and interpreting what they see. He strongly recommended—and we concur—keeping a copy on hand this full color poster that shows healthy and bad valves.

See more here. http://www.avweb.com/news/features/Savvy-Analysis-Valve-Protection-Report-Cards-228421-1.html

A Few Neat Links

Cy Galley - The World's Busiest Airport <u>EAA</u> <u>Airventure The Oshkosh Approach</u>

John Bender - <u>Lots of NEAT Photos</u> - When you think you are at the end, you are not!

Adam Santic - Bob Hoover - A Celebration of Life

Marty Santic - **DynaVibe**

Tom Shelton - Alaska Bush Flying

Tom Shelton - <u>SR-71 Timelapse - Disassembly and</u> Re-Assembly

Marty Santic - <u>iPad App Directory</u>

Marty Santic - <u>Understanding Angle of Attack</u>





You and Your Vacuum Pump (by Ron Franck)

Are you an IFR pilot flying an aircraft equipped with a vacuum pump? Then you probably know how dependent your vacuum operated instruments are on a reliable source of vacuum power. But did you know vacuum pumps have a hours-in-service lifespan? Your typical vacuum pump has a lifespan of 500 to 1000 in-service hours, depending on manufacturer's recommendations and they type of pump your aircraft is equipped with.

It's recommended that an aircraft owner keep a logbook of several critical components including the vacuum pump, magnetos and alternator.

For maximum vacuum pump life follow the manufacturer's recommended maintenance procedures such as changing the air filter.

Typically, when a vacuum pump fails the vanes fracture catastrophically to the point the pump locks up. Pumps are driven through a plastic gear on the engine side of the pump that is designed to instantly shear anytime the pump experiences abnormal drag, thereby preventing damage to your engine's accessory case. The installation of an annunciator will alert the pilot in the event of loss of vacuum.

Knowledge of the useful life of your vacuum pump through good record keeping as well as following the manufacture's recommend maintenance procedures go a long way in giving you peace of mind during those long IFR flights.

The Devil is in the Details

Since about 1970, our gyros have been powered by "dry" air pumps which use self-lubricating graphite vanes spinning inside of an eccentric aluminum cavity. Dry pumps have one big disadvantage, and that is their singularly unattractive failure mode: they work flawlessly for an unpredictable life span, then fail catastrophically and without warning (usually in a great puff of graphite dust).

Almost every case of premature dry vacuum pump failure can be traced to one of three causes: contamination, overstress, or faulty installation.

Dry air pumps are extremely vulnerable to contamination, particularly by liquids. The graphite vanes are designed to operate absolutely dry, and the introduction of any liquid can quickly destroy a pump. One of the most common causes of premature dry pump failure is contamination by solvents used to wash down



the engine compartment after maintenance. If solvent overspray enters the pump (usually through the discharge port or the drive coupling), it will mix with the carbon dust in the pump to create a sticky residue. Even a small amount of this stuff can cause the brittle graphite pump vanes to fracture in short order. Consequently, it is absolutely essential to cover the vacuum pump and its discharge tube (usually with a plastic bag) before spraying solvent.

Another common cause of pump failure is oil contamination. Oil can enter the vacuum pump in several ways. One frequently-seen culprit is a leaky pad seal gasket between the pump flange and the engine accessory case. Actually, any engine compartment oil leak that allows oil to get on the pump may find its way inside through the drive coupling. Alternatively, oil that gets on the vacuum regulator will quickly oilsoak the foam garter filter and then being sucked inside the pump itself. If even a tiny bit of oil gets inside a dry pump it's history.

A dry pump can also be destroyed by carbon contamination. A dry pump normally fails suddenly when a graphite vane or hub fractures, generating a cloud of carbon fragments. When the failed pump stops pumping, residual vacuum upstream of the pump often cause some of these graphite chunks to be sucked out of the pump and lodge in the hoses or vacuum regulator. If the system is not meticulously cleaned of carbon before a replacement pump is installed, the new pump may ingest these fragments. This may result in failure of the new pump in just minutes or hours.

Another cause of short pump life is overstress. This may be caused by a dirty central vacuum filter, a kinked air line, or any other obstruction or construction that causes the vacuum pump to work harder than it should.

Here's a typical scenario. As a result of maintenance (Continued on page 11)

You and Your Vacuum Pump (by Ron Franck)

(Continued from page 10)

or old age, an air hose in the vacuum system becomes constricted (due to kink or collapse). The pilot notices that the cockpit vacuum gauge reads lower than normal, and squawks this condition to his shop. The A&P readjusts the vacuum regulator to bring the vacuum gauge back to normal operating range, without troubleshooting the underlying cause. The owner is happy, the mechanic is happy but the pump is still be overworked.

Installing Pumps Correctly

Installing a replacement vacuum pump is a quick and easy procedure, but there are some important rules that must be followed to ensure that the new pump can enjoy a long, healthy life.

Make absolutely sure that a new pump is the correct model for direction-of-rotation. A wrong-direction pump looks identical, but won't last long.

Never clamp a new vacuum pump in a vise when installing the fittings. The soft aluminum pump housing can easily be distorted, ruining the pump. Factory new pumps come from the factory with a red-and-white "anti-vise" decal, but overhauled pumps typically don't.

Never use thread compound or Teflon tape when assembling threaded vacuum fittings. Any excess sealant could be ingested by the pump, causing its destruction. Manufactures recommend a sparing application of silicone spray on the threads, but nothing more.

Make certain that the vacuum system is scrupulously clean before installing a new pump. Always blow out the hoses with compressed air, replace the central vacuum filter and the regulator's foam garter filter with new ones, and check the regulator seat for trapped carbon fragments. Any contamination left over from the failure of the old pump can (and often does) result in premature destruction of the new pump.

Interestingly enough, one of the most helpful indicators of impending vacuum pump problems is the little red-and-white "anti-vise" sticker that comes affixed to every new Airborne dry pump. A darkening sticker is a reliable indication that the pump housing temperature is hotter than it should be. This usually means that the pump is working harder than it should, and is likely to fail prematurely. It's a good idea to check the



color of the vacuum pump sticker at each oil change.

I'd like to credit Mike Busch for much information appearing in this article, *Ron Franck*.

Sheet Metal Tools For Sale (from Warren Brecheisen)

1 Taylor T-2X rivet gun (new) \$145

1 Unibit 1/8 to 1/2" (new) \$15

1 Bucking bar (new) \$15

1 1/8" dimple dies (Cleaveland, new) \$25

1 3/32" dimple dies (Cleaveland, new) \$25

1 3/32" close quarters dimple dies (Cleaveland, new) \$25

25 Clecos, 1/8" (new) \$10

50 Clecos, 3/32" (new) \$20

1 Backriveting plate (new) \$20

1 Rivet gage set (new) \$5

1 Rivet set, 1/8" cup head (new) \$5

1 Rivet set, 1/8" cup head double offset (new) \$15

1 Rivet set, 1" mushroom (for flush rivets, new) \$10

1 Rivet set, 1/8" cup head, 3.5" long (new) \$5

1 Rivet set for backriveting (flush rivets, new) \$20

6 #40 drill bits (new) \$6

40 Abrasive disks, fine (new) \$20

1 Dynaswivel air hose flow control (new) \$20

1 Microstop (new) \$20

2 Microstop (used) \$15 each

3 Countersink cutters (#40, #30, #19, all new) \$6

1 Rivet squeezer (Avery, 3" throat) \$120

1 C-frame dimpler (Cleaveland, new) \$150

Contact Warren Brecheisen 319-277-2118

EAA CHAPTER 75 – QUAD CITIES 1ST SATURDAY COFFEE AND DONUTS MEMBER OR NON-MEMBER ALL ARE INVITED – BRING THE FAMILY

FREE COFFEE AND DONUTS AND SOME GOOD HANGAR TALK IN GENESEO AT THE "AIRPLANE FACTORY"

SATURDAY, February 4, 2017 8:30 – 11:00 AM (RAIN OR SHINE)

Hosted this Month by: Bob Johnson at His Warm Shop in Geneseo



FLY IN or DRIVE IN - HOPE TO SEE ALL

This month, hope to see all at our 1st Saturday of the Month coffee hosted by Bob Johnson at his "airplane factory" in Geneseo. The place is heated!! Come for some good hangar talk and meet your fellow chapter members.

DRIVE IN: Interstate 80 to the Geneseo Exit. The address is 19102 E. 1600 St. Geneseo, IL From the exit ramp of I-80 in Geneseo, turn north and go .8 miles to Rt. 6 East. Turn right and go 1.6 miles to 1600 E. Turn right and go 0.3 miles, shop is the grey barn on the left.

Items for Sale (from Tom Henry)

We are redoing the panel in our plane, N678RA and have the following for sale. Contact me at tomhenry3@aol.com or 402-417-8558 N678RA avionics for sale.

Dynon EFIS-D10A - SOLD

Dynon HS34 expansion module p/n 100790-000 NEW never used in original packing. HS34 new \$650.00 asking \$325.00

Bendix/King KT-76A p/n 066-1062-00 s/n 133089 mode A/C transponder with rack & connector. 91.411, 91.413 cert. August 2016. Removed for ADSB installation. Asking \$500.00 - **SOLD**

Trutrak flight systems digitrak s/n 1321 with model DSB-B servo s/n 1826. No brackets for servo. Asking \$500.00 - **SOLD**

2ea Vans Aircraft fuel quantity gauges, no senders. New \$37.00 ea., asking \$15.00 ea. - **SOLD**

Whelen model A500A-V-14, p/n 01-0770024-00 white tail light assy. with strobe tube. No strobe power supply unless you want the bad one. New \$229.00, asking \$100.00 - **SOLD**

Starduster Too Project For Sale

Items Included in Project

Airframe, Tailfeathers, Tailwheel, Ribs, Gussets, Upper Tank (needs repair), Lower Tank (needs repair), Tubing and Sheet metal, Spruce for wings, Boxes of

parts "Many many more parts", Rivets and screws, Large Heavy Table, Easel for Plans, Plywood, 2 sets of drawings, Extra Spruce

Located in Central Illinois, \$5,000.00 or Best Offer Contact Bob at 217-620-4350

Sonex Kit For Sale

Local chiropractor David Orme purchased the kit in 2005. Much of the kit is complete. Wings are off and bottom of tailcone has not been installed. Jabiru 3300 engine with composite propeller installed. Battery & avionics installed including backup avionics tery. Extra fuel in wings in cylindrical tanks forward of spar. Due to fatal snowmobile accident the whole package is for sale below cost. Contact close friend of





the family Mark Brand for information or to view.

Contact Mark Brand, 309-373-4785, Colona, IL



EAA Chapter 75 IMC Club

"To promote instrument flying, proficiency, and safety" http://eaa.org/imcclub

Meets First Tuesday of each month at 18:00 Lindquist Ford, 3950 Middle Rd., Bettendorf, IA

For more information contact:
Paul A. Fisher - rv7a.n18pf@gmail.com
Bernie Nitz - bernien@visioncrest.com
Ron Franck - ronaldfranck1@gmail.com

Chapter 75 Flight Instructors

Per a member request, am including a listing of Chapter 75 members that are flight instructors and would be willing to help with primary flight instruction, your next BFR or other. *If you are a Chapter member and a flight instructor please let me know and will include your name in the listing. Additions/Corrections are welcome!*

CFI / CFII	Phone	New Students	CFII	BFR	IFP	Airports	Plane
Mike Nass	563-357-6068	No, Booked	Yes	Yes	Yes	CWI	Owners Plane
Dean Jones	309-752-3841	Yes	Yes	Yes	Yes	DVN MLI	Owners, QC Flying Eagles
Tim Leinbach	309-781-9585	Yes	Yes	Yes	Yes	DVN MLI	Owners, FBO, Club Plane
Tim Toal	309-235-0087	Yes	Yes	Yes	Yes	DVN MLI	Owners
Barry Logan	309-303-0211	Yes		Yes		C75	Owners, Club Plane

For Sale: 1959 Piper Comanche 180

BEAUTIFUL IFR COMANCHE 180 • \$39,900 • www.sustainedflight.com for logs and additional pictures Engine 400 hrs Complete overhaul in 2008: PROP 200+ hours new bolts installed 1/2016: Airframe ~6000 Hangered at KDVN Tied Down at KPDK. Constant speed prop, retractable gear: Great handling aircraft very easy to move from high wing to this plane: Easy access to engine compartment: 9.5gph cruise: Annual 5-2015: IFR Cert 8-2015: AVIONICS Rebuilt/Recalibrated 5/2015 Narco MK12D TSO-TKM MX12 King KX78 Transp: ADs Current: Great cross country aircraft: Pilot seat rebuilt 5-2015: 50 gal fuel: Room for negotiations Lets Go for a ride! • Contact Mark Clark, Owner - located Atlanta, GA USA • Telephone: 5635086275 . 8772771940 . • Mark.Clark@Continuoustouch.com



NEW ITEM Also FOR SALE

I have a hangar winch to pull an airplane in and out of the hangar.

\$125

FOR Sale: Waiex Kit partially finished including all control surfaces, tail and main spars. The Waiex is the Y tail version of the Sonex. The kit is configured with dual controls, Aerovee engine mount, and conventional, tail dragger gear. The optional configurations could still be changed as these parts are not yet installed. I will include most tools and a 4x12 work bench if so desired. Kit is available for inspection/pick-up in Clinton, IA Asking \$10,000

Contact David Leners at 563-357-5104.



1974 C-23 IFR Beechcraft Sundowner For Sale



This is an outstanding aircraft, needs nothing, nicest Sundowner you will find. Excellent IFR platform. Exterior is a 9 and interior is a 7. Autopilot with altitude hold. All logs since new all AD's complied with, all equipment manuals included. Last annual and IFR certification completed Dec 2015. Hangered at KMU.

- 4,230 Hours Total Time
- 530 Hours Since Major Overhaul
- Paint looks great
- "\$20,000 in electronics above most Sundowners
- UPS SL70 Digital Transponder w/P.A. Display
- UPS SL15 Audio Panel with copilot isolate-music input 4
 place intercom
- UPS SL30 NAV/COM Digital Flip Flop
- TKM 170B NAV/COM Digital Flip Flop
- UPS GX50 IFR GPS Enroute, Terminal and Approach certified
- UPS Attenuator Panel
- UPS MD-200-306 Localizer / Glideslope / VOR
- TKM Digital Localizer / Glideslope / GPS / VOR
- S-TEC System 30 Autopilot with altitude hold slaved to everything
- S-TEC DG with heading bug

Sale price \$ 49,900

Contact Nathan 563-940-7293 anytime. Skjerseth@icloud.com



- AK360 Altitude Encoder
- Electronics International Digital Fuel Functions
- Electronics International Digital EGT / Cylinder Temp
- Electronics International Digital Volts / Amps
- Recent New Sensinich Prop Balanced
- Electric Trim
- Electric Flaps
- Dual Landing Lights
- Rosen Visors
- Vertical Card Compass
- Tanis Engine Heater
- Custom Cockpit Cover and Engine Blanket included



Local Calendar of Events

For many other Aviation Related events, visit the following websites. Click on the following links. Will only list events submitted to the editor and other most local events here.

EAA Aviation Calendar of Events
AOPA Aviation Calendar of Events
Iowa DOT Office of Aviation Calendar
Wisconsin Fly-Ins and Airshow Event Calendar
Illinois DOT Division of Aeronautics Newsletter
Fly-In Calendar Website
Fly-Ins.com Calendar Website
Fun Places to Fly Website
Social Flight Calendar
Midwest Flyer Magazine Calendar

Upcoming EAA Webinars

Go to www.eaa.org/webinars to view the schedule and to register.

Wed. February 1 - 8 p.m. CST GA and Big Data (Part 1) Presenter: Mike Busch

Wed. February 8 - 7 p.m. CST Exploring the Zenith 750 Cruzer Design in SOLID-WORKS

Presenter: Sebastien Heintz

Wed. February 22 - 7 p.m. CST Introduction to Modern Gyroplane Flying Presenter: Robert Snyder

Send event information on those activities that would interest the membership. Will be delighted to include any information on aviation related activities, fly-in breakfasts, etc. e-Mail your information to marty.santic@gmail.com

Classified Ads

DAR Services: Amateur Built/Light Sport Airworthiness Certification Inspections, Ferry Permits (Certified and Experimental), Replace lost/damaged Airworthiness Certificates (Certified and Experimental). Call Ross Carbiener (A&P) at 309-738-9391.

Hangars Available: At the Davenport Airport!! Call Tom Vesalga at **563-326-7783**.

For Sale: One share in the Four Seven Jays Flying Club. The club plane is an extremely well maintained 180HP 1973 Cessna 172M hangared at MLI. IFR equipped. Paint and interior new 2003. The following avionics were installed in 2010: Garmin GMA-340 Audio Panel/ICS/Marker, Garmin GNS-430W WAAS GPS/Garmin GI-106A CDI, Garmin 496 GPS, panel mounted, coupled to 430, Garmin GTX37 Transponder. NOW Asking \$3000. Dan Murphy 309-230-2679, Ron Ehrecke 309-236-9785, or Ralph Stephenson 309-737-6902.

For Sale: Wampus Cats Flying Club Share

Here is your opportunity for very economical flying! Wampus Cats Flying Club has been in existence since the 1950's. We have a well kept 1978 Cessna 152 which was purchased new and has always been hangared at Davenport. It has 5000 airframe hours

and 500 SMOH. Monthly dues are \$39.00 and hourly rate is \$50.00 wet. For more information on joining our Club please contact Bernie or Chris Nitz. (309) 798-2011. bernien@visioncrest.com

or cnitz@visioncrest.com



For Sale: Quad City Flying Eagles Shares
Shares for sale, Quad City Area Flying Eagles. Contact Ray Holland, 563 359 0450.

FREE: Know anyone in the chapter flies with an Aspen Evolution in their panel? I have a "how to" DVD from Sportys that I bought when The Flying Country Club acquired the Trinidad, which had one. A club member "broke" the airplane before I had a change to fly it, so the DVD is available to anyone who can use it. Don Fey. DonFey@mchsi.com

A QUICK REMINDER

Ron Erhecke will gladly accept your \$10 for the EAA Chapter 75 DUES for 2017!!

Help him by bringing your crisp bill to a the next meeting or coffee. Or send it to Ron at the address on the final page of this newsletter.

To place an ad: Submit requests for aviation related For Sale or Want ads to the newsletter editor. Ads are free to Chapter 75 members. Ads from nonmembers will be run on a space available basis. Ads will be run / re-run at the newsletter Editor discretion. If we run out of room, will make some more!!

Chapter 75 Merchandise Now Available (from Marty Santic)

As mentioned at the meetings, baseball caps are now available with the new Chapter 75 logo. The caps are of nice quality and the logo is embroidered, not printed. The caps are available for \$10 and will be available at our future monthly meetings. I will ship in a Priority Mail package for an additional \$5.00, if you cannot make one of the meetings. The normal price from Vistaprint.com is \$16. I ordered 30 and received a discount. If you would like a cap, please send me an e-mail. marty.santic@gmail.com If you would like me to ship, send a check to Marty Santic, 3920 E. 59th St., Davenport, IA 52807

Also available via CafePress are men's clothing items such as T-shirts, sweatshirts and jackets, women's clothing items, child's clothing items, accessories and holiday items with the logo. The logo is printed and not embroidered on all of the items from CafePress. Visit our store at www.cafepress.com/eaachapter75



Baseball Cap in Light Khaki





Men's Polo and Women's T-Shirt

EAA CHAPTER 75 OF (Effective January 2016)	FICERS	Kyle Voltz kvoltz21@gmail.com	309-945-5188	Tool Loan Off	icers	
, , , , , , , , , , , , , , , , , , ,		Technical Coun	selors	John Bruesch (Contact Info Above)		
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Wayne Sapp - Secretary		Terry Crouch (Contact Info		Marty Santic		
		Paul Fisher (Contact Info A		marty.santic@gmail.com	563-344-0146	
Flight Advisor	rs	Ron Franck (Contact Info				
Bernie Nitz bernien@visioncrest.com 309-787-0813		Jim Smith (Contact Info A		New Volunteers!! Thank-YOU!!		
		Bernie Nitz (Contact Info A				

We would like to make you aware that as always, in past, present, and future, any communications issued by Experimental Aircraft Association, Chapter 75, regardless of the form, format, and/or media used, which includes, but is not limited to, "The Landings" and audio/video recordings is presented only in the light of a clearing house of ideas, opinions, and personal experience accounts. Anyone using ideas, opinions, information, etc. does so at their own discretion and risk. Therefore, no responsibility or liability is expressed, or implied, and you are without recourse to anyone. Any event announced and/or listed herein is done so as a matter of information only and does not constitute approval, sponsorship, involvement, control or direction of any event (this includes Oshkosh). Bottom line, we are responsible for nothing. Please read, listen, enjoy, and be careful out there.

Bernie Nitz (Contact Info Above)



Always Remember...... The Time Spent Flying is NOT Deducted from Your Lifetime!



QUAD CITIES CHAPTER 75 MEMBERSHIP APPLICATION/RENEWAL FORM

New Member □	Name:					
Renewal	Copilot (spouse, friend, other):					
Info Change	Address:					
Membership dues for EAA Quad Cities Chapter 75 are \$10/year.		State: (Work):				
Make checks payable to EAA Chapter 75	(Cell): Email Address:					
Mail application/renewal to:	EAA#:	Exp Date:				
Ron Ehrecke - EAA Chapter 75	Pilot/A&P Ratings:					
1597 Deer Wood Dr Bettendorf, IA 52722	Occupation: Hobbies:					
National EAA offices:	I am interested in helping with:					
Experimental Aircraft Association						
EAA Aviation Center PO Box 3086	□ m 10 '''					
Oshkosh, WI 54903-3086		☐ Tech Advisor	☐ Flight Advisor			
http://www.eaa.org	☐ Repair Barn ☐ Hospitality	☐ Young Eagles ☐ Board Member	☐ Social/Flying ☐ Newsletter			
National EAA Membership:	Поѕрнанц	Board Member	Newsiettei			
1-800-JOIN-EAA (564-6322)	What are You Building?					
Phone (920) 426-4800						
Fax: (920) 426-6761 http://www.eaa.org/membership	What are You Flying?					
http://www.eaa.org/membership						