



Illinois Valley Beacon

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Chapter 563

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Breakfast Last Saturday, August 4th. We met for breakfast at our hangar at Mt. Hawley Airport. Approximately thirty members and guests were in attendance. Afterwards a flock of Young Eagles took to the air. The squadron was organized by Kathy Arkwell and John Schuler, with Ron Wright and Joe Rex assisting by piloting several aircraft.

Picnic Instead of our regular second Thursday of the month Chapter meeting, we will hold a picnic on Saturday, August 18th, at our hangar at Mt. Hawley Airport, starting at noon.



The Chapter will provide the barbecue and beverage. Please bring a covered dish and your own table service, as this will be a potluck.

Showing Improvement

After Chapter Treasurer Morrie Caudill's heart catheterization last month, tests revealed that there was still a blockage. Consequently Morrie underwent quadruple bypass surgery.

Naturally, this was quite an experience, but fortunately, except for the artery blockage, Morrie is in pretty good shape. He is making a strong textbook recovery and we are all hoping that in time he will once again be soaring with the eagles!

Flying to the Beat of a Different Drummer...



Observed at AirVenture 2001

"The gasoline engine is dead, it just doesn't know it yet." SMA test pilot Peter Peirport's vision of the future would be grim, if he weren't pushing the latest alternative-engine solution.

The idea goes something like this: Piston power with 30-percent fewer parts, turbo-assist, a 30-percent reduction in operating expense, less vibration and less noise, with increased reliability and single-lever operation ... burning Jet A fuel. Crazy, right? Well, the European-certified (as of April 20) SMA SR 305 engine is

meant to prove otherwise.

Pierport flew to OSH behind the powerplant in a modified Cessna 182, and while the statistics from his low-altitude trip were impressive, the nine-gallon-per-hour fuel burn was about 30 percent higher than the engine's high-altitude goal. But if the ads are true (and when aren't they?), this engine will produce 60-percent power at 25,000 feet and fly for 3,000 hours before recommended overhaul.

Though the engine is certified in Europe, its optimal installation is a work in progress. The engine tends to run hot, and when compared to, say, an IO-540, the SMA engine needs about four times the airflow -- which made for an interesting cowling on the 182 and may cause some extra cooling drag ... down low, anyway.

Regardless, spewing gloom and doom for the future of 100LL, which it says will be removed from the market within 10 years, SMA sees a strong and growing worldwide demand for its engines. The demise of 100LL is one thing, but with fuel prices on the rise and worldwide availability on the decline, even U.S. manufacturers Maule and Cirrus are taking more than a casual look at using the powerplant.

Both companies have 30 engines on order, with plans to develop a high-altitude cruiser if the market demand is found (abroad or here). In most other parts of the world, interest in the project is as high as their astronomical avgas prices.

SMA's train of financial and technological backers offering support to this engine reads like a who's who of European



SR 305 diesel engine burns Jet A fuel

aviation. Even if the product is destined to suffer years of refinement from its current configuration, it's not likely to go away until it works.

Everyone from government agencies to Airbus to Renault Sport and beyond are involved, at least to some degree. Aware that the program cannot be fully unleashed until a support system is in place, SMA is currently working to establish that network and keep development close to home.

However, Embry-Riddle Aeronautical University is taking a front seat in U.S. support development. ERAU is acting as a technological test center for the engine's installation and maintenance and may announce official partnership on some level in the very near future. From OSHflash.

Two Old Timers Meet Again....

What do you expect someone just three months shy of his 102nd birthday would be doing on a summer morning in Wisconsin? Well, if you're talking about Ralph Charles, he would be flying a 1929 Ford Tri-Motor ... again.



The EAA invited Charles to take their prized bird around the pattern a few times during AirVenture, and while it was fun, it wasn't anything new for Charles. Captain Charles --

test pilot and theater organist -- flew a Tri-Motor for TWA 10 hours a day for three years back in the 1930s.

After deplaning from the Tri-Motor at Oshkosh, Charles told AVweb, "Handled the same way, same old thing." He recounted flying his first solo in 1922 and earning his pilot's license in 1928, and told of regularly seeing Charles Lindbergh at the airport.

During WWII, Charles became a test pilot, flying the Navy's Curtis Helldivers as they came off the factory floor. Each had to be flown for two hours before they were delivered to the war effort, and it was Charles putting the time on them.

After the war, his flying ended. "My wife made me quit flying," Charles told AVweb. "I quit for 50 years, but then when she passed away, the first thing I did was get another airplane. Once you get flying in your system, you can never get it out."

He flies an Aeronca now, but would like to take the controls of a space shuttle. "I told some friends when John Glenn went up, 'Hey, if you want an old guy, take me.'"

While Charles may never get to fly an actual shuttle mission,



Ralph Charles flying Ford Tri-Motor

he has flown the simulator, and "I could land it, yeah." He is the country's oldest pilot and shows no signs of slowing down. Keep on keeping on, Captain Charles, and we'll see you the same time next year. From OSHflash.

Galley's Garage Helps Sick Airplanes

by Randy Dufault

Cy Galley wants to be sure your airplane leaves AirVenture the same way it came, in the air and safe.

As the chairman of Emergency Aircraft Repair, Galley organizes and manages an extremely well-qualified group of volunteers, who donate some of their time here to fixing what is broken.

Emergency Aircraft Repair originated prior to AirVenture's move to Oshkosh. EAA Chapters 33 and 75 started the service when it became apparent that airplanes sometimes required service and maintenance before they can leave the event.

Now operated as a service project of Chapter 75, based in the quad cities of Moline, Ill., Davenport, Iowa, Rock Island, Ill., and Bettendorf, Iowa, Galley has chaired the operation for the last 10, or maybe 15, years. Nobody can seem to recall the exact date he took charge.



Over the years Chapter 75 has acquired a large variety of aircraft repair tools and equipment, much of it donated. Each year a group of volunteers load it all into the Chapter's trailer and head for Oshkosh.

Now housed in a permanent structure built by Chapter 75 members, Emergency Aircraft Repair had operated out of a tent until three years ago. According to Galley, the reduction in dust and dirt with the new building is one of the biggest pluses.

A large inventory of repair parts and pieces is also part of Galley's responsibility. "We're pack rats," Galley said. "We never know what we are going to need from year to year, so we save everything." Many of the parts are leftovers from various Chapter member building and restoration projects.

Another part of the Chapter's collection consists of a number of aircraft technical manuals, many of them rare editions for classic airframes. A personal computer is available for researching airworthiness directives and service bulletins. The staff can also go online if necessary for particularly difficult research projects.

Galley's work starts well before AirVenture. Volunteers



World's Busiest Control Tower

must be recruited and scheduled, new equipment must be acquired, existing equipment may need to be repaired, and the whole works must be moved to Oshkosh. Included in the volunteer group he organized for this year are a designated airworthiness representative (DAR), five certificated inspectors (IAs), five certificated airframe and powerplant mechanics, and eight EAA Technical Counselors. In all there are more than 40 Chapter 75 members, from all over the country, involved.



C-17 The Heavy Stuff

Emergency Aircraft Repair has helped as many as 200 airplanes over the course of a convention. Although the number varies from year to year, it is seldom less than 100. Although the group will do everything in its power to get an airplane back in the air, sometimes it just isn't possible. In those cases the group will help the owner disassemble the craft and make it ready for a surface trip to a place where it can be returned to an airworthy state.

When asked why he continues to put his time and effort into the endeavor, Galley said, "This is a wonderful focus point for our members, someplace to rally around at AirVenture." From www.eaa.org.

Companies chip in for regional airport study

PEORIA - A troika of central Illinois companies has hired a Missouri firm to study regional air service. HNTB Corp., headquartered in Kansas City, will look at the operations of five airports in central Illinois and the airports' ability to meet future passenger traffic needs. The airports to be studied are in Peoria, Bloomington, Champaign, Decatur and Springfield.

"Too many people in central Illinois are experiencing delays by being routed through Chicago or St. Louis or are opting to drive to Chicago, St. Louis and Indianapolis," Bob Viets, retired Chairman of CILCO, said in a written statement.

Caterpillar Inc., State Farm Insurance Co. and ADM are chipping in up to \$500,000 for the study on how to best serve the region's 1.3 million annual air travelers.

"We need more information about the business and leisure travel demands that exist today and what will exist tomorrow," Steve Stockton, a State Farm vice president, said in a written statement. "The strong business environment in this part of Illinois depends on fair prices and direct service to major airports in the United States."

HNTB has done similar studies in northwest Arkansas, Virginia, West Virginia and the Florida panhandle. The firm

worked on a new 1.7 million-square-foot international terminal building at the Dallas/Fort Worth International Airport and on the Shreveport Regional Airport.

U.S. Rep. Ray LaHood, R-Peoria, has said that the group, known as the Central Illinois Business Council, has indicated to him that it would focus on the feasibility of a new regional airport, something LaHood opposes.

American Airlines CEO Donald Carty has said a regional airport could add destinations and lower fares. Some members of the business group have denied the study is aimed getting a new regional airport. From PJS.

TIP You say you were spraying your airplane out in the drive and some of the over-spray got on your neighbor's nice shiny new Rolls? Explain to him, while fending off the ax he's coming after you with, that it's possible to get it off without using rubbing compound or anything else that might damage the finish. After the paint is dry, get some Zebra Clay from the automotive paint store and use it to remove the over-spray. It might have a different name, but they will know what you want. It takes some rubbing, but it performs miracles. Stolen from Tim Cunningham, chapter 1143,



The Light Stuff!

proprietor of the Cunningham Airplane Factory.

Warning — Money Pump ADs

The money pump failed on my airplane last Thursday. It seems it had not been properly installed, pumping money out of my wallet and into my mechanic's bank account for some time.

A long process to troubleshoot the problem, remove the part, inspect it and contact National Airplane Parts Association for an AOG request. While they had it out, they also found that the cash filter was clogged, which as we all know, would slow down the flow of cash.

That problem has been cured, and my airplane successfully pumped an easy \$1,000 out of me yesterday. I expect the new money pump will work rather well for some time. I have the part number for the new model pump if anyone needs it. Ain't flyin' life grand?

Note from editor...

I found that there is not one but two ADs on the money pump, but I forget the numbers. The first AD says that the money pump's wire transfer unit needs to be checked. They can be disabled from lack of use, and will fail when you need it to run large volumes through the pump. You will have to send it out to be checked for account number verification, and if they don't match your current accounts, then the wire transfer unit will need to be realigned.

Normally the money pump is manually activated at the ignition key, but the second AD now requires that the money pump have the manual switch bypassed, and must run continuously.

Don't forget, depending on your model of money pump, you may have the "old" style pump, which can be inadvertently installed in either direction. The new ones can only be installed to deliver a negative cash flow. Make sure yours is reinstalled properly upstream of the money pit, or the pocketbook aft of the firewall may overflow with dangerous lucre. Yep, flyin' life is grand. Usually "two" grand. - Author Unknown.

August 17 - 19 - OSHKOSH, WI - Ducks Unlimited Great Outdoors Festival, EAA Convention Grounds. <http://www.dugof.com> or <http://www.duck.org>.

August 19 - MENDOTA, IL - Fly-In Breakfast @ Grandpa's Farm.

calendar of events

August 24 -
26 -
MATTOON,
IL.- Midwest

Luscombe Fly-In.

August 25 — MUSCATINE, IA — Short Wing Piper Club Fly-In.

August 30 – September 3 — BLAKESBURG, IA — Antique Airplane Association Fly-In at Antique Airfield.

September 1 - PEORIA, IL - EAA Chapter 563 first Saturday of the month breakfast at Mt. Hawley Airport .

September 2 - McNABB, IL - Fly-In / Drive-In Breakfast at Harttenbauer Airport.

September 2 - ADDISON, IL - Chapter 101 Young Eagle Rally at Schaumburg Regional Airport, 630-543-9213

September 7 - 9 — GALESBURG, IL — Stearman Air Show and Fly-In at Galesburg Municipal Airport.

What's this Aircraft? Find out next Month!



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