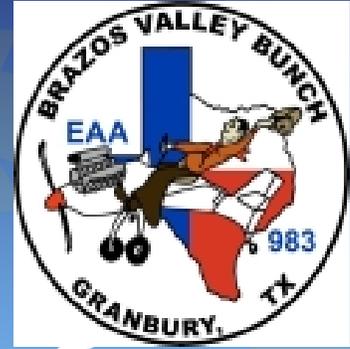


FALL 2014

# RIVETING NEWS



## Plane Power

Bringing power to the  
people!

**SOLD! SOLD! SOLD!**

Hartzell Propellers announced at Oshkosh that our own Plane Power was bought by them lock, stock and barrel. Hartzell Propellers, in an effort to control all things from the firewall forward purchased Plane Power alternators and plans to move the manufacturing facilities to Montgomery, Alabama once the transition is complete. Jason Hutchinson, Pecan Plantation resident and chief bottle washer at Plane Power seemed quite excited and pleased with the announcement. For the time being the current employees, many Pecan residents, will remain employed but will be given the option to move to Alabama when the factory relocates. How many will go with the company is unknown. Les Staples, co-founder of the company was pleased that he and his employees were able to produce such a good product, that Hartzell would take interest and buy them out in the nine short year they were in existence. Skytec starter, which is in an adjacent building at the Granbury Airport will remain here producing state of the art Aircraft Starters.



## *In this issue*

- *Plane Power*
- *Oshkosh Review*
- *Major Award winner*
- *Autogyros*

## *Upcoming Meeting*

*Fall Fly-in  
Sept 20*

*Oct 11 Garmin  
(tentative)*

*\*\*Nov 8 FAA\*\*  
awarding the  
Wright  
Brothers  
Award and  
annual 983  
membership  
meeting. Don  
Rogers Hangar  
at The  
Landings*

**Misc. Notes**

If you are buying fuel for a friend you need to be present at the pump

September 20th EAA 983 Fly-in. If you want to volunteer please sign up. We are still in desperate need of volunteers to assist with the food operations, Kid Venture and Young Eagles. Even if you have just 30 minutes, let Karen Woodward know. [Ktribble@gmail.com](mailto:Ktribble@gmail.com) 817-408-9576

Sept 6-7 Red Bull air races at TMS.

Tickets still available. If you haven't seen these races on TV they are fast paced and over a short course. How they will do it in the confines of TMS will be a sight to see.



**FLY-IN**

OTX1  
(Pecan Plantation Airpark)

**SEPTEMBER 20, 2014**  
09:30 - 16:00  
Pecan Plantation  
Plane View Park

**SILENT AUCTION  
GREAT PRIZES!**

Cheap Lunch | Great Food | Showcase of Aircraft | Fly-Bys | Tons to See  
Kids Model Airplane Contest | KidVenture with Flight Simulators & Games  
Young Eagles Program - Free plane rides kids 8-17 yrs | First Come, First  
Scheduled will be flown  
Must Sign Up - PARENTAL SIGNATURE REQUIRED

Contact Doug Crumrine  
817 559-4665  
frflyboy@gmail.com

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**OCTOBER 3-5, 2014**

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Original Article by Bruce Brandon (Ed: Not all this information applies to Homebuilt AC)  
**Free Legal Advice**

### Expert Aviation Attorneys Discuss Maintenance and Its Legal Perils

One of the great things about being at Air Venture is that there are countless presenters who are experts in their field and they are more than willing to share their knowledge with all. Two of these experts, Mike Pangia (Washington, DC) and Pat Phillips (Orlando, FL) are experienced aviation attorneys as well as holding ATP and A&P ratings and are on EAA Legal Advisory Council. They are not “ivory tower” guys but “hands on” aviation participants. They gave an excellent presentation on Tuesday, as they do at every Air Venture, regarding some of the legal areas that affect every aviation maintenance technician (AMT).

A recurring problem in aviation is interpretation of FARs e.g., what exactly does a FAR mean. Is it to be interpreted literally or does one apply common sense? When the FARs allow an IA or A&P to have another person to work under them, what is required of an IA and A&P? Does the IA have to literally see all the work that is done by a helper? What if inspection panels are replaced before the IA can see it? Can the IA take the word of the helper? Does the IA/A&P have to physically see the helper torquing a bolt? What about gapping a spark plug? These are all very difficult questions that are normally raised for one of three reasons: there has been an accident/incident; someone has complained to the FAA or the FAA decides to audit the IA/A&P or his/her shop. The only answer that is always 100% correct is for the IA to physically inspect everything the helper does.

When an IA/A&P returns an airplane to service, he/she is certifying that the airplane is airworthy. What is airworthy? 14 CFR § 3.5 states “Airworthy means the aircraft conforms to its type design and is in a condition for safe operation”. The rub is, what does safe operation mean? What additional duty does it impose on the AMT? An airplane can technically comply with its type certificate, including STCs, but not be safe to fly. How is this? As was explained during the presentation an excellent example is multiple STCs.

We all know that STCs are allowed on aircraft but many don't realize that STCs are not necessarily tested with other STCs installed on the same aircraft type. This can result in unintended consequences that can be disastrous. An example of this potential is an airplane with multiple STCs that boost engine power. What if one STC on the carburetor boosts the power by 20 horsepower, a different propeller gains an additional 10 hp, a different exhaust gets another 10 hp, and bigger cylinders get another 20 hp. Individually, the engine, airframe and propeller could handle the STCs increase in horsepower but the aggregate horsepower increase may exceed the structural strength of the crankshaft, airframe or propeller.

One example of cumulative STCs that resulted in a tragedy was a Cessna 337 that had multiple STCs installed on its wings. The airplane was “legal” re conforming to its TC but the cumulative effects resulted in wing failure.

This begs the question, since an IA/A&P mechanic certifies the airplane to be airworthy on its return to service, would the mechanic who installed the last STC before a catastrophic failure resulting from multiple STCs being applied to an aircraft be liable, either administratively or in a tort action. Something to think about.

Other issues discussed were when mandatory service bulletins must be accomplished, fraudulently signing logbooks, preventive maintenance, conditional inspections, and annual inspections, and what are the consequences to the AMT who is involved in any of these activities.

Seminars of this extremely high quality are just another reason to come to Air Venture.

## Are Gyroplanes The Ugly Stepchild Of Aviation? I Think Not.

### What Does It Take To Become A Gyroplane Pilot?

Gyroplanes are probably the least known segment of general aviation but surprisingly enough not the new kid on the block. Invented by the Spanish engineer Juan de la Cierva to create an aircraft that could fly safely at slow speeds, the autogyro was first flown in 1923 in Madrid, Spain.

Unlike the helicopter which takes air from the top of the rotor and forces it down for propulsion the autogyro has a free-spinning blade which keeps the craft aloft by working as a swinging wing, where air comes from the bottom up through the rotating blades. By tilting the rotor mass, via the control stick left or right, you can cause the aircraft to turn left or right. Moving the stick forward or backwards causes the aircraft to move forward and backwards but not to the ability of hovering like a helicopter. The autogyro can fly at zero airspeed but will be descending at about the same rate as a conventional parachute. Keep the blades spinning by moving forward or down and the blades are always producing lift and can never stall or spin, giving the autogyro ability unlike that of fixed wing aircraft or helicopter.

If you're a private pilot fixed wing with at least 150 hours the FAR's say you need 10 hours PIC in gyroplanes and 20 hours of dual. If you hold a helicopter rating the gyroplane rating becomes an add-on with no specific minimum training but a recommendation and check ride is required.

**Sport Pilot Privileges:** If your gyroplane meets the definition of a Light Sport Aircraft (LSA - no more than 1320 gross wt., less than 120 knots max level airspeed, and no more than two seats, etc.), you may fly that gyroplane with your "Sport Pilot (SP) privileges". If you hold a Recreational or higher pilot certificate, you already have SP Privileges. In order to exercise those privileges, you need an endorsement (practical test – oral and flight) in your logbook, from a CFI or CFI-SP for that make / model of gyroplane, regardless of whether you will carry a passenger. Note, a CFI can give you the practical test - a Designated Examiner is not required! But, to get this SP endorsement you will need to work with two gyroplane instructors – one to (train and) endorse you to take the practical test, and one to give you the practical test and SP endorsement. This only applies if your gyroplane meets the LSA criteria of weight, speed and number of seats. (Pilots exercising Sport Pilot privileges must always have a gyroplane category and class PRIVELEDGES logbook endorsement before operating a gyroplane. Pilots exercising Sport Pilot privileges are limited to the specific make / model "set" of light-sport gyroplane they are operating.) One advantage of this Sport Pilot privileges option is that no FAA medical will be required.

There are training facilities throughout the country where you can obtain a rating before you decide to buy.



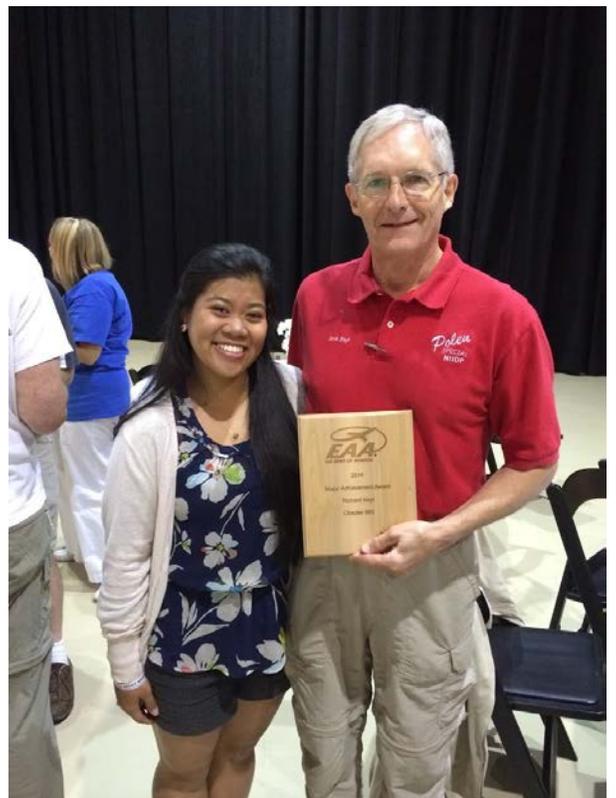
FMI: [www.autogyrousa.com](http://www.autogyrousa.com)

## EAA Recognizes Chapter Leaders

Chapter Leaders Breakfast To Honor Those Who Serve Their Chapters Selflessly.

Many things take place behind the scenes where the din of T-6's flying overhead are muted. One such event was the EAA's national breakfast for the individual chapter officers. This year's breakfast was opened by comments from Jeff Skiles, who will be turning over his post this year as he decided on what to do next with his career. Jeff Spoke in the Founders Wing of the EAA museum about the importance of the Young Eagles program and the new Eagles program designed to encourage and mentor those older enthusiasts.

This year's 'Major Achievement Award' was presented to Dick Keyt, of Granbury, Texas for his lifelong contributions to EAA. Dick is a member of EAA Chapter 983, 'The Brazo Valley Bunch', located at Pecan Plantation Airpark about 65 miles Southwest of DFW airport. Dick is the owner of the Polen special, designed and built by Dennis Polen and now housed at Pecan Plantation where Dick runs the Dennis Polen Education Foundation which was founded in 2003. Dick is a retired airline pilot, certified flight instructor, AMT and holds a BS in Aeronautical Engineering from the University of Minnesota. The foundation mentors interns with one-on-one training in the practical application of construction, problem solving and building. Students reside at the Polen facilities in Granbury, Texas. Students learn to apply their knowledge using machine tools, computer programs and technical skills to solve challenging engineering and construction problems in a real-world environment. Students also have the opportunity to pursue their FAA pilot ratings.



Dick introduced one of his current students, Amie Pinratana who is in her senior year of Aeronautical Engineering. Amie was at her second Oshkosh, the first visit she spent time as a camper at the Air Academy. This time she was overwhelmed with the vast amount of aviation here at Oshkosh.

Congratulations to all this year's winners.

## Jim Bede Is Back With A New Design!

### Designing Airplanes For Over 55 Years Jim Bede Unveils The BD22L

Once called “The best damned airplane designer in the world.” by Learjets Bill Lear, James R. Bede has designed and built more planes, received more awards, holds more patents and has garnered more attention than nearly anyone else in the aviation industry. Bede’s list of aviation design achievements is staggering: 18 innovative aircrafts that include standouts such as the exciting piston-engined BD-5 pusher and BD-5J mini-jet, which have both thrilled a generation of air-show crowds; the twin-finned fighter-like BD10, designed to hustle a flying executive across the country at supersonic speeds; and the extreme long range BD-2 ( in which Jim broke three distance records and took a shot at a solo globe-circling record in 1969) is strikingly similar to the later Kelly Johnson-designed U-2 spy plane.

Of the 15 Bede designed models, 11 are no longer in production. The BD-17L is the LSA version of the original BD-17, single seat aircraft and uses half-inch honeycomb sandwich panels, a concept originally used in the BD-1 and the Yankee.

With the just introduced BD22L, Bede has attempted to answer the needs of his customers by giving them what they asked for such as;

- A wide cockpit
- State of the art avionics package
- A low build time
- Low maintenance and operating cost and
- Choice of power plant

Although a prototype can be seen at the Bede booth on the North part of homebuilders headquarters, specifications were scarce on the website. This is known; the cabin is 47' wide, among the industries widest. Fuel capacity is 30 gallons and the airplane is capable of flying with the canopy open. The prototype uses a low cost avionic suite comprised of a pair of panel mounted iPads paired with an iLevel to feed the gyro functions. The range is anticipated to be 600 NM and the BD22L can accept engines from 80HP to 120HP. Prices currently are \$89,950, which includes everything but paint. The question is, do you want to give this guy your money?



FMI: [www.bedecorp.com](http://www.bedecorp.com)

## Chapter owned tools

1. Dynavibe Prop balancer.
2. Electronic scales for weighing aircraft
3. Prop torque wrench for Hartzell-MT Props.
4. Torque wrench 5-80 ft pounds.
5. Nose seal tool.
6. Various cable crimpers and cutters.
7. Hose mandrels.
8. 'C' clamps. C-6, C-11, C-18.
9. Rotary angle finder.
10. Grinding wheel dresser.
11. Printer for updating glass panel.
12. Hobby-Air forced air breather.
13. Citation HVLP spray unit with fresh air breather.

## Chapter Member Special tools

- |   |               |              |
|---|---------------|--------------|
| 1. Tire bead breaker, wheel balancer, sparkplug cleaner/tester, aluminum tube bender and flaring tool, Cam Loc pliers, Handheld Digital Prop Tach checker, Punches for panel instruments, brake bleeder pump. | Charlie Adams | 817-219-0162 |
| 2. Large glass bead machine, Cylinder wrenches, Ring compressor bands.  | Gary Bricker  | 817-219-0524 |
| 3. Engine hoist, Pipe expander to tighten 1 3/4" exhaust slip joints. Don Saint 817-578-7339  | Don Saint     | 817-578-7339 |
| 4. Sparkplug tester and Gap tool.   | Steve Wilson  | 817-279-1379 |
| 5. Engine hoist.  | Bill Eslick   | 817-579-5593 |
| 6. 36 inch brake/shear/roller, tube beading tool.   | Damon Berry   | 817-219-0007 |
| 7. High Wing Jacks Cessna 177/182   | Sid Tucker    | 817-279-9237 |

# Want Ads

(you got things to sell? We sell 'em)

**Complete Lycoming O-235-C engine** and Sensenich Prop for sale. The engine comes with log book, starter and carburetor (no alternator). The engine has 3940.2 hrs total time and 151 hrs since major overhaul. The prop is a 74", 46 pitch, Model M76A Sensenich Prop that has been reconditioned for this engine, selling both for \$7,500.00.

Email me at [Lawrence@lakegranbury.com](mailto:Lawrence@lakegranbury.com) or call 817-894-1095.

**Electric Power Tow for sale.** About 2 years old, in excellent condition. Sell or Trade for Gas model. Wanted to buy: used gas-powered tug. Power Tow or similar.

Mark Finkelstein: [mark.finkelstein@gmail.com](mailto:mark.finkelstein@gmail.com) 607-699-1750.

**Aircraft Detailing. Shark Aviation** specializes in detailing of aircraft of any size you can afford. From J-3 cubs to Small jets. Prices vary depending on size. Located at Granbury Airport but she is completely mobile and "Plane wash can travel"

Kelly Hicks: [winnerranch@hotmail.com](mailto:winnerranch@hotmail.com) or 254-592-9492

## Exxon Elite Oil

Rated for both wear and corrosion. All profits benefit the Dennis Polen Foundation.  
\$77.14/case Dick Keyt 817-279-7590

## HOUSE for SALE

5b/5b 3 car garage, Formal dining, and living. Two family rooms and separate office.  
3000sq/ft hangar with elect/air and full bath. Best view in PP Airpark. 817-579-1850

For pixs: [buhwana@charter.net](mailto:buhwana@charter.net)

**Are you a FACEBOOK user?**

“LIKE” EAA983 Chapter and feel free to post aviation stories and pictures.  
(If you don't know what Facebook is ask your grandchildren.)

[www.facebook.com/Eaa983](http://www.facebook.com/Eaa983)

## Observations Of A Week At Airventure

As The Annual Pilot Pilgrimage Winds Down, Just A Few Parting Thoughts.

In no particular order here are a few thoughts about this years annual event called Airventure.

This was the first year for the US Air Force Thunderbird demonstration team. They did not fail to excite and please the crowd. I have been in aviation since Moby Dick was a minnow. I've seen most every flying act there is, was and has been, but the Thunderbirds never fail to bring out the little kid in me. I watch as they fly by in formation, wishing that it were I sitting in that cockpit, flying right wing, with my eyes glued to the right wing tip and helmet of my flight lead. I let out a little giggle thinking it's me approaching from the backside of the crowd at just under the speed of sound, hearing nothing in the cockpit but the rhythmic draw on my oxygen mask and the hum of the electronics, knowing that many in the crowd will be scared out of their pants as they first see me (or maybe never see me) and then feel the roar of my jet engine a few seconds later. If a team like that can excite an old dude like me you know that every little boy or girl who thinks about flying wants to be in the Thunderbirds. Just the name, "Thunderbirds" congers up a mythical creature that is all-powerful and ready to pounce on its victim. Who wouldn't want to sign up for the Air Force when the proper age is reached? Let's hope that the lure of big money programing video games like the "World of Witchcraft" doesn't distract them from becoming the next Thunderbird squadron leader.

In my late inning wanderings I stopped by the Lost and Found for no other reason than to ask them 'What was the strangest thing that was lost and then found? I was told that someone had lost an eyeball! Yes it was returned but one wonders how long it took the person to realize it was missing? I can hear that conversation, Man to Wife, "Honey, I really had my eye on that RV-10". "That's nice dear but you know it's not in our budget". "No, you don't understand, I had my EYE ON that RV-10".

Someone came by the lost and found to claim her little miniature 'something' dog, which was in a carrier. Apparently this lady left 'FiFi' in the trust of her husband who got distracted and walked away. Hey it can happen when distracted by airplanes, right? Another nice fellow was nice enough to retrieve a wallet and turn it in. Nothing unusual about that but this one had been lost at the bottom of the porta-potty. You can give that man a free ice cream cone or something for that effort but I'm not shaking his hand.

A few years ago chalets were the final straw that provided the final push out the door for Hightower. Last year the members were happy to see the air show without looking through the plastic curtains of the Chalet but folks they're making a comeback. One Chalet, sponsored by Shell was providing breakfast and lunch daily and dinner during the night air shows. They also provided a nice, unfettered place to see the air shows. Even though the cost was \$125 per person, per day (ouch!) they had no

shortage of customers and were sold out on several days. The promotional company that put on the affair told me they would love to have more tents. CHA-CHING

EAA also had their own Chalet for Life Time members. The cost of entry was whatever it cost you to become a lifetime member, a number I think depended on your time left on this earth. Snacks, drinks and free ice cream were a hit at the tent. A friendly and dry place to watch the air show was a bonus. The AOPA Chalet door guardian, Bill Shay, a friendly chap, perfectly suited for the job, used a gently hand in determining who's story was believable when told patrons forgot their badge. One child was allowed per adult, causing some to pick their favorite child. Kids who came in were seen walking out with four or five ice creams to become the coolest dude to their friends.

Well, that's it for this year. Let us know how you liked our coverage or what you would like us to cover next year. We're here to please you. Getting our aviation 'jollies' is just a bonus.

Tom Woodward