




The Flightline

EAA Chapter 958 San Marcos, TX
Where every day is a good flying day!
October 2014 Issue

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No October Chapter Meeting

The October meeting has been deferred until the November Chapter meeting at at Elm Creek Airpark during their annual Fly-In (See enclosed brochures or chapter website)

Meeting Time: 10:00 am, Steve Sewells hanger

NEW CHAPTER WEBSITE: www.958.eaachapter.org

Prez Sez

Hi 958

I do hope you all enjoyed last months meeting. We did have a little malfunction getting the pancakes started. But ironed it out and got things cooking. I have passed on many thanks to the Civil Air Patrol for there information and presentation on there organization. I hope that some insight was provided that would encourage some of you to possibly working with this fine group.

As we discussed the October meeting will not take place. Instead the chapter will meet on Saturday the first of November at Elm Creek Airpark. Joining them for their yearly fly-in. the chapter will have a brief meeting that morning starting at 10:00 AM. Steve Sewell will host the chapter meeting at his personnel hanger there at Elm Creek. Please bring a chair (if possible) as seating will be limited. Directions are as follows; from IH-10 and Hwy 46 Exit 607 off I-10 take Hwy 46 south to FM 467. Turn right on 467 approximately 5 miles to Tailwind Dr. (second signed road on right from intersection of Hwy 46 and 467). Turn right onto Tailwind and follow signs to parking. Mr. Sewell's hanger is on Headwind DR. (first street to the right after crossing runway) last house on the right end of street. Those with aircraft are encouraged to fly-in and further info on Elm Creek can be obtained at www.elmcreekairpark.com . There are numerous activities which can be enjoyed after the meeting, so come on out and enjoy the day.

We will be sending a November newsletter to you all with info on the Christmas party. So please keep an eye peeled for that information. Hope to see you at Elm Creek.

Phillip Steele

Subaru Engines for Sale

I have two Subaru EA81 cores with many of the parts that came with the project but don't need. I plan to use a Rotax 582 instead. I'm not sure what they are worth but would like to get them out of my garage. I will also throw in the engine stand. I am located in Kyle, not far from the airport. I can be reached at (512) 644-7493 anytime.

David Nesmith,
Vice-president, PRA chapter 65

From the Editor

Its hard to believe we're at the middle of October already - where has the time gone? With Haloween just around the corner it signals the start of the 2014 holiday season, ready or not. As noted on page one, we're bumping the October chapter meeting in favor of meeting at the Elm Creek Airpark on November 1st. If weather cooperates the way it did last year the event should be great. Plenty of good food, good friends and airplanes in a beautiful setting. Please come and join in. Flyers for flying in or driving to the Fly-In are elsewhere in this newsletter.

While looking for topics for our Safety Corner I've decided to start from the ground up (literally). As a first time aircraft owner, I'm discovering how little I actually know about aircraft. While checking the landing gear on my Cherokee for possible attachment of wheel fairings, I noticed the tire on the nose gear appeared to be a little low. So I tried checking the pressure with the gauge I use for my car and bike - couldn't get a good reading. So I got my trusty hand pump out (it has a built in gauge) and tried to administer air to my anemic tire - no soap. It wouldn't fit.. So I checked with the good folks at Redbird and they said they could help me.

Considering my aircraft tires require considerably less pressure (24 lbs.) than either my car or bike, I figured I should do a little research on the care and feeding of light aircraft tires. So I'm including the first part of a 2 part article on tire maintenance I found on AVWeb.com. Please feel free to offer comments hints etc. on this and other safety topics.

On another topic, We continue to search for programs of interest to our members that will be educational, entertaining and informative. Please provide input to your chapter officers on what you would like to have happening at your chapter meetings. We have been very fortunate to have free access to a beautiful facility at Redbird Skyport. Now is the time to develop the chapter into an active resource for the local aviation community and the communities at large from the surrounding areas.

And don't forget I'm looking for updates on all those projects out there for the newsletter. Let us know about the OhOh's and Ah Hah's encountered along the way.

Peace and Clear Skies

Safety Corner

Aircraft Tires

An aircraft tire is a sophisticated, computer-designed, multi-component product consisting of three major materials: steel, rubber and fabric. Taking this down a level, there are multiple types of nylon and rubber compounds in tire construction, each with its own special properties designed to complete the task assigned. The only thing they have in common with auto tires is that they are round.

Tires are available in tubeless and radial construction for the heavy iron, but by and large light twins and single-engine, piston-prop aircraft have a choice limited to tube-type, bias-ply tire brands and subsets within brands. Your choice is nominally an economical model, a mid-price version, a high-end model or a retread. Retreads are particularly popular with flying schools.

Aircraft tires are approved under the FAA's Technical Standard Order system (TSO). All TSO-C62b-qualified tires with a speed rating of 160 mph or less — as well as TSO-C62c-qualified tires — do not require re-qualification to TSO-C62d unless the tire is changed.

Tire Selection

When selecting a tire, check your POH for the requirements for your aircraft. It will include both a size, such as 6.00-6, and a ply rating, and sometimes a brand and model recommendation. The ply rating determines the load-carrying capability of the tire. Stick to the POH on both size and ply, because you can end up with unexpected results if you elect to experiment with unapproved tires or ply ratings. If there is an STC for specialty tires, such as flotation types as may be used on a bush plane, that's fine. You, of course, will pay an airspeed penalty in that case.

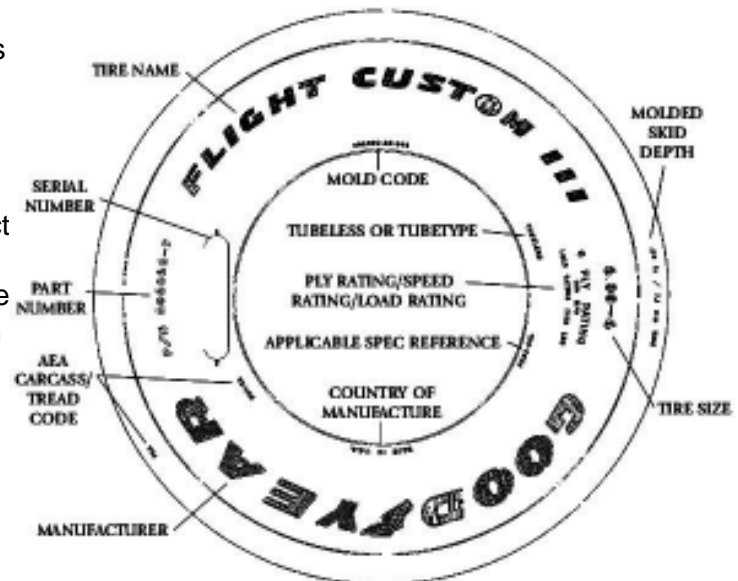
Note that the term "ply" is used to identify the maximum-rated, static-load capability and corresponding inflation pressure applicable to specific operational requirements. The ply rating is an indication of tire strength and does not specify the actual number of carcass plies within that tire.

Only a small number of piston GA type aircraft come with tubeless tires and include the Beech Duke, Queen Air, Twin Beech and Cessna 404 Titan. Note that the same tire may have different inflation pressures (especially nose wheels) due to airplane loading differences. Be sure to check your aircraft's maintenance manual for the correct pressure for *your* airplane. There is also a good chance that the nose-wheel tire is a different size and different inflation value than the mains.

Tire Mounting

The valve stem should be aligned with the red dot or triangle on the tire, which indicates the circumferential location of the light spot on the tire.

Goodyear tubes are marked with a yellow stripe to indicate the heavy spot; if there is no yellow spot, then the valve is considered the heavy spot.



Tires are marked with much of the information you need when you're ready to replace them

Tire Inflation

Due to the properties of the materials from which they are constructed, aircraft tires will expand for up to 12 hours after initial inflation. As the volume of the tire increase, the effective pressure will decrease.

Therefore the inflation pressure of newly mounted tires should be checked after a minimum of 12 hours and re-inflated to the required pressure. Consequently, tires should not be placed in service until they have been inflated a minimum of 12 hours, pressure rechecked, and tires re-inflated if necessary. Within the next 24 hours, if the pressure decreases more than five percent, it could be caused by trapped air between the tire and tube, valve-core leakage, or a damaged tube.

It's really important to maintain proper inflation, as this affects the tire life (from wear and heat) as well as performance, from hydroplaning to wheel shimmy. (Of course improper maintenance and wear can also cause similar performance problems.)

Tire Maintenance



This tire suffered from both overinflation and alignment problem. Aircraft with tire wear problems, not attributable to tire balance, need to have the alignment checked. Check your maintenance manual for applicability and specific procedures. Some aircraft have very limited adjustments. Inflation should also reflect the load and temperature profile on heavier aircraft.

Check pressure and tire condition daily with multiple flights or before flight with cool tires. A temperature change of 5°F produces approximately one-percent pressure change. It can take up to three hours after a flight for tire temperatures to return to ambient. This means that tire pressures change on a daily basis.

These are all reasons why it is important to check pressure daily or before each flight. Excess inflation pressure should never be bled off from hot tires. All adjustments to inflation pressure should be performed on tires cooled to ambient temperature.

When tires are going to be subjected to ground temperature changes in excess of 50°F because of flight to a different climate, inflation pressures should be adjusted to worst case prior to takeoff. The minimum required inflation must be maintained for the cooler climate; pressure can be readjusted in the warmer climate. Before returning to the cooler climate, adjust inflation pressure for the lower temperature.

[Aircraft Spruce & Specialty](#) has an excellent pressure gauge that reads in one-pound increments, as well as a separate tool that has a specialized adapter for fitting through wheel pants. And while you're at it, always use the MS valve caps with the o-ring core to keep the valve stem clean and the loss of any air through the valve core — Spruce has them, too.

Given a choice, use nitrogen gas in lieu of shop air. Shop air may have excessive moisture, which makes it even less desirable than ambient air for use in tires. Nitrogen will not sustain combustion and will reduce degradation of the tube or liner material, casing plies and wheel due to oxidation.

If you find any signs of damaged wheels, be sure to replace them as they are under terrific stress. Aircraft Spruce has an excellent selection.

Making Tires Last

Besides maintaining proper inflation, tires should be kept clean and free of contaminants such as oil, hydraulic fluids, grease, tar, and degreasing agents, which deteriorate rubber. Contaminants should be wiped off with denatured alcohol and then the tire should be washed immediately with soap and water. When aircraft are washed, ideally, tires should be covered with a waterproof barrier.

Goodyear adds antioxidants and antiozonants to the sidewall and tread to help prevent premature aging from ozone in the air and weather exposure. The use of aftermarket tire dressings (especially any automotive type) and wipe-on or spray-on protectants is generally not recommended since they may actually accelerate the loss of factory protectants.

Aircraft tires, like other rubber products, are affected to some degree by sunlight and extremes of weather.

While weather checking does not impair performance (as long as no carcass is showing), it can be reduced by protective covers when the plane is tied-down outside, especially in hot, dry, sunny climates.

If you have spare tires on hand in your hangar, be sure to store them away from fluorescent lights, electric motors, battery chargers, electric welding equipment and electric generators, since these products create ozone, which is harmful to rubber.

According to Goodyear, there is no specific shelf life for aircraft tires; it depends on storage conditions.

Air Academy Opportunity for Kids 12 through 19

[2015 Air Academy Enrollment Now Open](#)

EAA is now accepting applications for the 2015 Air Academy summer aviation camps. Held at the beautiful EAA Air Academy Lodge in Oshkosh, Wisconsin, these popular camps immerse young people ages 12 through 19 in the fascinating world of flight through a variety of fun, hands-on activities, including real flight experiences in a Cessna 162 Skycatcher and Bell 47 helicopter. All fees include room and board, programs, and flights. Visit the [Air Academy website](#) for more information, or contact Camp Supervisor Scott Cameron [via e-mail](#) or by calling 920-426-6165. Fill out the [2015 Air Academy Chapter Reservation Form](#).



*Know any young folks interested in Aviation?
Let them know about this program!*



**Elm Creek Airpark's
18th Annual Fly-In
Saturday, November 1, 2014**

10am to 3pm

Lasagna Lunch starting at 11:30

\$9.00 per person – Halloween attire encouraged

Raffle at 12 pm

FAA Identifier: 0TX6

Multicom Frequency 122.9

2280 x 80 ft. turf

Elevation 550 ft MSL

4 mi. SSW of Seguin

AIRCRAFT PARKING

Monitor 122.9

Look for "Follow Me" golf carts

WX ASPS at BAZ

119.325 (830)629-7979

TRAFFIC PATTERN

RUNWAY 14 LEFT

RUNWAY 32 RIGHT

LAT/LONG: 29-30-18N/097-59-49W

Fuel @ New Braunfels 12 nm N

Aviation related questions?

Call Steve Sewell – 210-844-2156 or

email at sjsewell@gmail.com

Sponsored by Elm Creek Homeowner's Assoc. Social Committee

For info and prior year photos see www.elmcreekairpark.com

Carol Sewell – Publicity – 210-844-2155 or carolamessewell@gmail.com



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18th Annual Fly-In
Saturday,
November 1, 2014**

10am to 3pm

Lasagna Lunch starting at 11:30

\$9.00 per person- Halloween attire encouraged

Raffle at 12 pm

Driving In? Fly-In is at 201 Tailwind Drive, Seguin, TX

Please follow and obey all signs. Aircraft have right-of-way.

Yield to aircraft taking off, landing, and taxiing

Questions? Contact:

Carol Sewell 210-844-2155 or carolamessewell@gmail.com

For more info or photos of previous fly-ins go to www.elmcreekairpark.com

EAA Educational Opportunities (Webinars)

10/22/14 **Chapter Chat: Fun with Flight Simulators**

7 p.m. CDT

EAA Chapter Manager

From recreational desktop simulators to Advanced Aircraft Training Devices (AATDs), this webinar looks at the different types of flight simulators available today and how EAA chapters can use them to grow and engage their membership. Topics include general guidelines for flight simulator usage, acquisition and operational costs, flight training and currency requirements, usage in conjunction with chapter youth programs, and more.

10/29/14 **AeroVee Turbo Engine**

7 p.m. CDT

Jeremy Monnett

Sonex Aircraft CEO and EAA lifetime member Jeremy Monnett presents an update on the newest 100-hp VW engine, the AeroVee Turbo. Details will be shared on the design and philosophy of the AeroVee engine conversion. Using the latest technology, the AeroVee Turbo package builds on the success of the AeroVee, which was first made available as an engine conversion more than 30 years ago.

11/5/14 **A Mechanic's Liability**

8 p.m. CST

FAA AMT & Wings Credit

Mike Busch

EAA Sport Aviation's maintenance columnist Mike Busch discusses why A&P mechanics are so frightened of being sued, the impact that this litiphobia (fear of being sued) has on the decisions they make and the cost of maintenance, and how an owner can reduce his maintenance costs by dealing with this issue head-on. Qualifies for FAA Wings and AMT credit.

11/12/14 **Fabric Covering With Poly-Fiber and Ceconite**

7 p.m. CST

Qualifies for FAA AMT Credit

Jon Goldenbaum

Jon Goldenbaum from Consolidated Aircraft Coatings discusses aircraft fabric covering. Consolidated manufactures three of the major brands of fabric-covering products: Ceconite, Randolph Dopes, and Stits Poly-Fiber. Jon wrote the procedure manuals for Poly-Fiber and Ceconite STC'd covering processes. Join him as he provides a comprehensive background of these common aircraft covering systems. Qualifies for FAA AMT credit.

11/19/14 **Advanced Flying with ForeFlight Mobile**

7 p.m. CST

Qualifies for FAA Wings Credit

Eric Hake

ForeFlight evangelist, certified flight instructor, and FAA Safety Team Representative Eric Hake guides you through flying with ForeFlight Mobile using real-world flight scenarios. Beyond the basics, this webinar will show you how to make the most of ForeFlight in all phases of flight. Qualifies for FAA Wings credit.