

The Flightline



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

March 2017

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Monthly Presentation

March 18 10:00 am

At Redbird Skyport Conference Room
San Marcos Regional Airport

Program:

“Runway Safety: Best Practices and Hot Spots”

Presented by: Mike Keyworth
KHYI Tower Manager

Coffee and donuts at 9:30 am

Hangar Talk

Wow! Looks like we're off to a happening year. RedBird Skyport hosted the AOPA Rusty pilots program 2/25, the EAA had its new Mobile Exhibit at South by Southwest (SXSW) Create this past weekend, we have our regular get together this coming weekend and there is a Young Eagles program happening here on the 25th. Whew!

On Saturday we're fortunate to have Mr. Mike Keyworth, Manager of the San Marcos tower Speaking to us about “runway safety” so please come by and show Mike how we appreciate the work he and his guys do for us.

February Meeting

We had a great program put on by Brian Lloyd about his planned flight following Amelia Erharts last around the world attempt. Lots of work and lots of money getting all the arrangements for fuel, landing and overfly permissions in place. The program was preceded by a presentation of a Plaque of Appreciation to John Koenreich GM of RedBird by past President Phillip Steele. John and his staff have been very supportive of our chapter, and we appreciate having this outstanding facility to meet in. We also want to thank Rose Robinson of RedBird for graciously helping set up the refreshments and keep the coffee pot full.

(cont. pg. 2)

(Cont from pg 1)



Left: Brian Lloyd explains the intricacies of planning an around the world flight

Right: John Koenreich shows the plaque presented by Phillip Steele

Below: We had a good turnout for Brian Lloyd and the Chapters' first open house.



AOPA Ambassador Pat Brown presents “Rusty Pilots” seminar at RedBird



Pat Brown gave a very informative and pertinent talk at the Rusty Pilots seminar 2/25. He discussed topics such as Airspace, radio techniques, airport protocols and much more. AOPA has produced some very nice training material that was given as handouts for the program and participants receive a ground school endorsement for their logbooks that can be used toward their Biennial checkout.

EAA's New Mobile Exhibit at Austins South by Southwest

EAA has a new Mobile Exhibit that is traveling the country making its first Central Texas appearance at Austin's premier media event, South by Southwest (SXSW). The exhibit provided attendees an opportunity to see a 3D view of the EAA museum and grounds, try out a Redbird flight simulator, build a model glider and make a cookie cutter from strips of aircraft aluminum and a pop-rivet. Chapter 958 provided volunteers to assist Tricia Rathermel, EAA Marketing Manager of Tradeshows and her staff with interaction with the attendees which on Saturday and Sunday was almost overwhelming. So many gliders were made, we ran out of parts Sunday about 5:20 pm and we could see the "EAA gliders" all over the facility. I think everyone considered the event a big success for introducing the non-flying public to the EAA.

Many thanks go to our Chapter 958 volunteers who helped a fantastic EAA staff with the event. 958 volunteers during the event included Clell Bond, Larry Bowles and his wife Barbby, and John Brecher and his wife Nancy. They all helped to make the event a success.



Above Left: Larry Bowles, John Brecher, and EAA Tricia Rathermel, EAA Marketing Manager of Tradeshows

Above Right: Redbird simulators in the exhibit

Left: The EAA's beautiful new Mobile Exhibit prior to start of the event

Below: There were long lines for all of the stations at the mobile exhibit all day Saturday and Sunday



(Hangar talk cont.)

Young Eagles

We have a couple Young Eagles programs in the works, one coming up next week which is being spearheaded by Chapter member and member of the local CAF Wing Grant Lannon.

We have two AFJrROTC units coming to the hangar ramp in front of the CAF hangar to fly Young Eagles on Saturday 25 March. Akin High School has sixteen cadets looking for Young Eagle rides and I don't have final count on Del Valle AFJrROTC cadets coming. We will start flying at 10AM. When the cadets arrive in the morning, I am hoping to shuttle the ones waiting for flights to a tower tour and to Redbird for simulator experiences. Please arrive at 0930 so we can brief and assign cadets to flights. I expect everyone to have a Young Eagle security clearance (check EAA Young Eagles website for information). So far we have three aircraft committed but I am going to email potential pilots individually.

If you are interested in helping as a pilot with an airplane, you can email me at GLannon@texas.net and call or text me at 512-924-5406. If there is a weather problem, we will delay flights or use Sunday as a backup. I will also be at the Chapter 958 meeting on March 18th.

Thanks for your help, Grant Lannon

The other is being organized by John Brecher, Chapter YE Coordinator.

The Young Eagles program is making some new contacts to increase our participation. I have met with Suzi Mitchell The career, Technical Education Director at Hays CISD. She had been trying to find someone with EAA Young Eagles to see about the program. I've also reached out to both Boy and Girl Scouts.

We also worked with EAA at the South by Southwest display. It was well attended with a good amount of traffic but don't think we will net any new local members. It does however, look like we will get a good amount of Young Eagle young folks. There were some home school groups very interested and well as many individual families. Now we have the potential for needing more pilots and planes. We need to get everybody who can help with either flying or ground support.

John L. Brecher

Please keep in mind that all EAA personnel working with the Young Eagles, pilot OR ground personnel MUST have completed the EAA background check prior to working with the program. We will have a sign up sheet for pilots and personnel wishing to work with the program at the meeting. You can also let John Brecher know you are available and get your confirmation certificate to him. To obtain the background check simply sign on to the EAA website and follow the links to the short lesson and background check. Note: we cannot allow anyone not verified on the background check to work with the kids.

Chapter Shirts

Chapter shirts will be available for those who did not pick up their shirts last meeting and should be available for those that ordered late. Please be sure you get the shirt you ordered. There may be a couple large and extra large shirts available for those who would like extras.

Russ

Secretary's Report

A few notes from the February chapter and officers meetings. The chapter held its first open house, members and guests enjoyed coffee and do-nuts. Seating was in the Redbird hangar. John Koenreich and the staff at Redbird where presented with a plaque in appreciation for their support of our chapter, EAA, and general aviation.

The polo shirts ordered by the chapter had arrived and where available for pick-up for those who ordered them.

Chapter member Mr. Brain Lloyd gave a presentation on his upcoming round the world flight. The attempt to be made within the next few months marking the anniversary of Emelia Earhart's attempt. He will retrace her flight via the equator. Upon completion of the flight he will be making a visit to Oshkosh Airventure in July.

Items on table for discussion at the officers meeting where as follows.

1. Making the open house a yearly event.
2. Having the next young eagles event and looking at dates.
3. With interest by both Redbird and the chapter there is discussion of the possibility of having a fly-in on the order of the one done two years ago, just after the flooding in the local area.
4. Camping spots for the chapter members attending Oshkosh this year.
5. Placing a second order for polo shirts due to increased interest.
6. Setting up permanent dates and times of year for fund raising and young eagles events.

Submitted by Phillip Steele

Treasurers Report

February financial: Total deposits of \$ 564.81, from dues and T shirt sales. \$48.25 of that amount was payment from "Specialized Aero." Total checks written \$661.23, also related to purchase of T shirts and awards. Ending balance of \$1850.24 at end of February

Submitted by Steve Sewell.



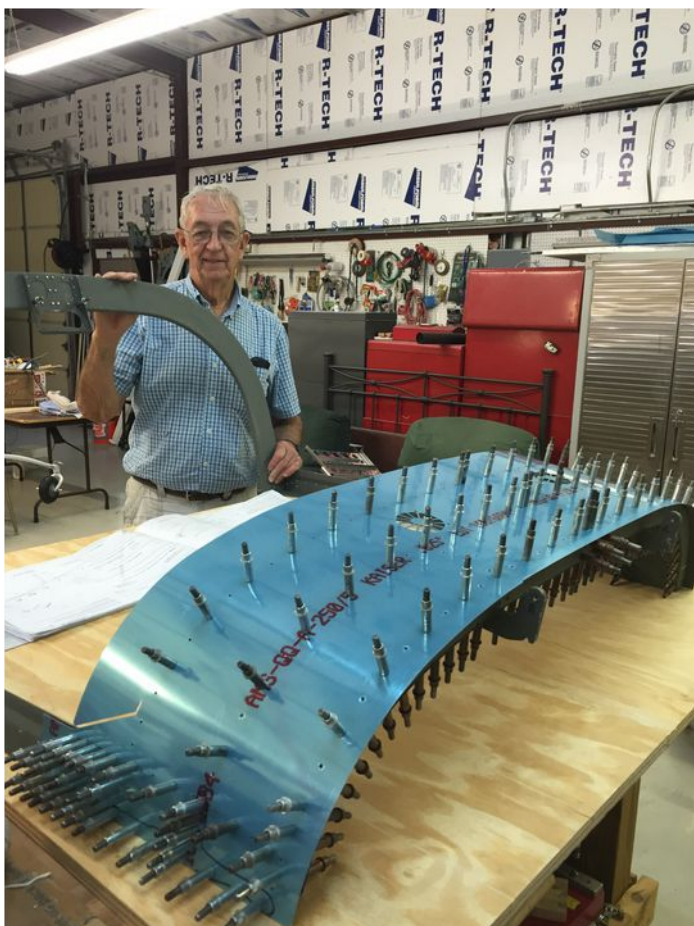
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Steve Sewell's RV14 Looking Good

The RV 14 build is going well. Slowed down while I was out of town last week. Ron Vanbeek has been helping me when more than one person is required to do something. The wheels are mounted, and we may have it sitting on them by the weekend. Presently working on the canopy frame. Careful work is required to assure a good fit.



Why Change the Oil?

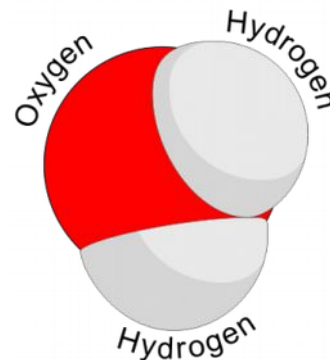
From an AOPA Blog by Mike Bush – Submitted by Steve Dixon

Continental and Lycoming tell us that we must change the oil in our engines every 50 hours or 4-6 months, whichever comes first—and that's if we have a full-flow oil filter installed. If we have only an oil screen, then the oil change interval goes down to 25 hours. Did you ever wonder why we need to change the oil so often? It's not because the oil breaks down in service and its lubricating qualities degrade. The fact is that conventional petroleum-based oils retain their lubricating properties for a very long time, and synthetic oils retain them nearly forever. Consider, for example, that most automobile manufacturers now recommend a 7,500-mile oil-change interval for most cars and light trucks. That's the equivalent of 150 to 250 hours of engine operation. In fact, oil analysis studies have shown that a synthetic automotive oil like Mobil 1 or Amsoil can go 18,000 miles without appreciable degradation, and that's the equivalent of 400-600 hours.

Filth

No, the reason we change oil in our aircraft engines every 25 to 50 hours is not because it breaks down. It's because it gets contaminated after 25 to 50 hours in an aircraft engine. In fact, it gets downright filthy and nasty.

Dihydrogen monoxide (DHMO) is a highly corrosive chemical that is produced in copious quantities during combustion, and can cause great harm to costly engine components when it blows by the piston rings and contaminates the engine oil. You may be more familiar with DHMO, its common chemical formula: H₂O.



Compared with automotive engines, our piston aircraft engines permit a far greater quantity of combustion byproducts—notably carbon, sulfur, oxides of nitrogen, raw fuel, partially burned fuel, plus massive quantities of the corrosive solvent dihydrogen monoxide or DHMO (see graphic)—to leak past the piston rings and contaminate the crankcase. This yucky stuff is collectively referred to as “blow-by” and it's quite corrosive and harmful when it builds up in the oil and comes in contact with expensive bottom-end engine parts like crankshafts and camshafts and lifters and gears. To make matters worse, avgas is heavily laced with the octane improver tetraethyl lead (TEL), which also does nasty things when it blows by the rings and gets into the crankcase. (If you're as old as I am, you may recall that back before mogas was unleaded, the recommended oil-change interval was 3,000 miles instead of 7,500 miles.)

So one of the most important reasons that we need to change the oil regularly in our Continentals and Lycomings is to get rid of these blow-by contaminants before they build up to levels that are harmful to the engine's health.

Acid

Another reason we need to change the oil regularly—arguably even more important than disposing of contaminants—is to replenish the oil's additive package, particularly its acid neutralizers. When sulfur and oxides of nitrogen mix with DHMO, they form sulfuric acid and nitric acid. If you remember these dangerous corrosives from your high school chemistry class, then you'll certainly appreciate why you definitely don't want them attacking your expensive engine parts.



To prevent such acid attack, aviation oils are blended with acid neutralizer additives. These are alkaline substances that neutralize these acids, much as we might use baking soda to neutralize battery acid. These acid neutralizers are consumed by the process of neutralizing acids, so it's imperative that we replenish them before they get used up to an extent that might jeopardize our hardware. Of course, the way we replenish them is to change the oil.

(Why Chang Oil? Cont.)

How can we tell when the acid neutralizers in the oil have been used up? It turns out that there's a laboratory test that measures the level of unneutralized acid remaining in the oil. This is known as the "total acid number" or "TAN" test. Some oil analysis firms can perform this test on your oil samples. However, it's not routinely done as part of the normal oil analysis report, so you need to specially request a TAN test when you send in your oil sample (and be prepared to pay extra for it).

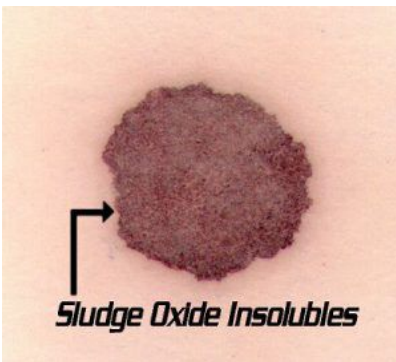
Most owners don't bother with the hassle and expense of TAN testing, and simply change their oil at a conservative interval that's guaranteed to get the junk out and fresh additives in before anything untoward is likely to occur.

On my own airplane, what I do (and generally recommend to my clients) is to change the oil and filter every 50 hours or 4 calendar months, whichever comes first. This means that operators who fly at least 150 hours a year can go 50 hours between oil changes, but operators who fly less will use a proportionately reduced oil-change interval.



This recommendation assumes that the aircraft has a full-flow (spin-on) oil filter installed, that it operates primarily from paved runways, and that it has decent compressions and relatively low blow-by past the rings. Engines that have only an oil screen (no filter) should have the oil changed every 25 hours. Engines that operate in dirty or dusty conditions and ones that have high oil consumption due to high blow-by should have more frequent oil changes.

My friend [Ed Kollin](#)—lubrication engineering wizard who used to head Exxon's lubrication lab and who developed [ASL CamGuard](#)—is even more conservative. He preaches that oil should be changed no less frequently than every 30 hours, and frowns when I suggest that it's okay to go to 50 if you fly a lot.



Another important indication of oil condition can be found in standard oil analysis report provided by some labs—notably the one I prefer, Blackstone Laboratories in Ft. Wayne, Indiana—is the "insolubles" test. This test is performed by placing the oil sample in a centrifuge to separate out all solids and liquids in the sample that are not oil-soluble. Virgin oil normally contains no insolubles. The insolubles found in drained engine oil come from three sources: (1) oxidized oil that breaks down due to excessive heat; (2) contaminants from blow-by of combustion byproducts; and (3) particulate contamination caused by poor oil filtration.

If your oil analysis report reveals above-normal insolubles, it might be indicative of an engine problem—high oil temperature, excessive blow-by, inadequate filtration—and almost certainly means you should be changing your oil more frequently. By the way, did I mention that I'm a huge fan of laboratory oil analysis? I use it religiously, recommend it strongly to all piston aircraft owners, and believe that it's one of the most important tools we have—along with oil filter inspection and borescope inspection—for monitoring the condition of our engines and determining when maintenance is necessary.

AIR SHOWS AND FLY-INS

March 18-19, 2017, **Heart of Texas Airshow**, Waco / TSTC (KCNW). Only Thunderbirds appearance in central/north Texas in 2017, 112 nm north of KHYI. www.heartoftexasairshow.com

April 4-9, **Sun'n Fun**, Lakeland FL. Smaller version of Oshkosh, they will supposedly have over two dozen P51s in attendance along with the Blue Angles, 839 nm from KHYI. Alternately you can see the Blue Angels at Corpus Christi NAS April 1-2 or at Oshkosh.

April 28-30, **Critters Lodge Fly In** (TE01). Located in the middle of no where about 136 nm northeast of HYI near the Leona VOR its a private large grass strip identified on the sectional as Dillard. Fairly well attended camping and lodging is available (<http://www.critterslodge.org/>)

April 29, 2017, **Annual (Gulf Coast Regional) KLBX Fly-In**. Angleton. Probably a car show as well along with a pancake breakfast, KLBX is about 130 nm from KHYI.

May 6, 2017 **Old Kingsbury Aerodrome** semi annual show

May 19-20, 2017, **7th Annual Armed Forces Weekend Celebration and Fly-In** (Morgan Military Aviation Museum). Brady, Curtis Field (KBBD), 108 nm northwest of KHYI in a keyhole under the Brady MOA.

May 28, 2017, **Breckenridge Airshow at KBKD**, 178 nm from KHYI. Tora! Tora! Tora!

July 24-30, **Oshkosh**, 954nm from KHYI. The Big Kahuna.

September 29-October 1, 2017, **STOL Roundup, Hondo TX**. KHDO 76nm from KHYI. They claim they had nearly 300 visiting planes at its former location in Llano, KHDO has much more ramp space.

Safety Corner

EAA Webinars

Date	Time	Presentation	Presenter
3/22/17	7 p.m. CDT	Prepare for Your Checkride, and Pass Qualifies for FAA Wings credit.	Larry Bothe
3/28/17	7 p.m. CDT	Safety & Loss Prevention Qualifies for FAA Wings credit	Clinton Johnson
3/29/17	12 p.m. CDT	Aircraft Liability Insurance	Bob Mackey, Falcon Insurance Agency
4/5/17	8 p.m. CDT	What Does "Airworthy" Mean? Qualifies for FAA Wings and AMT credit.	Mike Busch
4/12/17	7 p.m. CDT	Top 10 Used Airplanes for The First-Time Buyer	Glen Oliphant
4/19/17	7 p.m. CDT	VMC Club – Is Textbook Knowledge Enough? Qualifies for FAA Wings credit.	Radek Wyrzykowski, EAA Manager of Flight Proficiency