



# The ThunderWord

Thunderbird Field EAA Chapter 1217

February 2016

Scottsdale, Arizona

## **PRESIDENT'S CORNER**

Greetings from my corner of the hangar! At the January meeting Tom Clements lined up former Beechcraft executive Jack Braly to talk about the Starship program. There was a packed standing room only crowd and everyone learned the real Starship story from a guy that was involved throughout the program. Thanks Tom for putting together this great program.

We are just around the corner from this year's Cactus Fly-In at Casa Grande. It's always a great time to catch up with old friends and look at some really nice antique, vintage warbird and homebuilt aircraft. There is even a great opportunity to volunteer to help run the Fly-In. The info is in the Cactus article.

EAA National has made a decision that future Young Eagle pilots will need to go through training and a background check before they can give Young Eagle rides. Needless to say this has caused some dissension in the ranks. I personally am not going to provide my social security number and personal information to a low bid third party vendor of EAA for a background check. That would be like using your Visa card to pay a Somali cab driver. Maybe the training and background checks are only the first step and medical, logbook, compass correction card and aircraft paperwork are the next step. These times they are a'changing.

Pilots usually hold themselves and their planes to a higher standard of both personal integrity and aircraft airworthiness than mandated by the FAR's and societies laws. I would have to assume this is a top down mandate from people that are not pilots or aircraft owners and have no idea of the expense of both personal time as well as

dollars we go through to maintain our planes and our proficiency.

See you at the February meeting!

*Curtis*

## **FEBRUARY CHAPTER MEETING**

The next meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, February 18th, starting at 7 pm, at the Scottsdale Aviation Business Center, 15041 North Airport Drive. Thanks to the hard work of Dan Muklow we have found a very unique speaker. This month's guest speaker is George Middlestetter: In the early 50's there was a weekly TV show called "You Asked for It" hosted by Art Baker. It was a TV show where viewers wrote in and asked to see a certain stunt performed. A viewer asked to see a plane to plane transfer. The producers of the show contacted Arnold Cole, of the west coast division of the Cole Bros Airshow, and asked him if they could perform this stunt. George was not an airshow stuntman and it is possible he had never even been in an airplane before doing this stunt! He agreed to try the stunt, which was really done twice. The first time was to see if they could do it and the second time for the TV crew. The lower aircraft was a Fairchild PT-19 flown by Lester Çole (who is still living and is in Sun City, AZ). The upper aircraft was a Cub flown by Dean Cole (Duane Cole's nephew). The rear seat of the PT-19 had George and Arnold Cole helping him. The photo plane was flown by Ray Stits.

George will bring extra copies of the DVD that he will show at the meeting and hopes to sell them at a nominal price. The DVD gives the complete inside story and has the film of the actual show.

## **CACTUS FLY-IN**

### **JUST AROUND THE CORNER**

The 58th Annual Cactus Fly-In will be held at the Casa Grande Airport Friday and Saturday, March 4 and 5, 2016. Arv Schultz is running this year's show and he needs help on Thursday through Saturday. Thursday and Saturday evenings are setup and teardown. Thursday is setup in the afternoon.

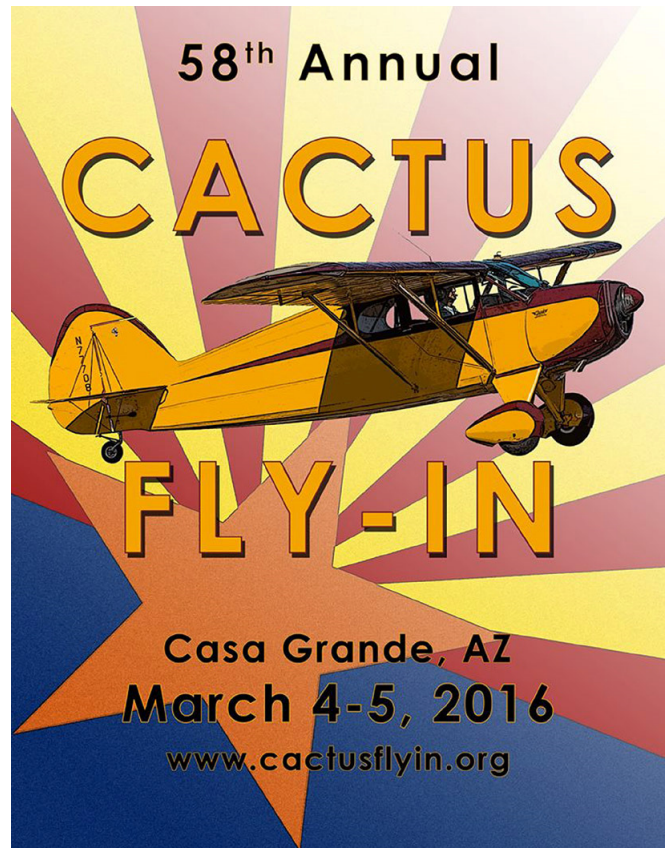
On Friday and Saturday, the days kickoff early at 0730 for briefing and coffee. You will be given your duty assignment with Fly-in veterans teaming up with new folks. Remember no experience is required. If you can't make the early show there many shifts to staff throughout the day. Most people pitch in for four hours so there is still plenty of time for looking at planes. Remember there are no bad jobs! To get your VIP parking pass and instructions stop by the February EAA Chapter meeting or contact Arv directly at 602 275-1016

## **JACK'S CHIPMUNK**

### **RECIEVES TRANSPLANT**

Jack Pollack decided last year it was time for a new engine for his Chipmunk. Since Gipsy Major engines are scarce as hens teeth on our side of the Atlantic he had one built in England. He traveled to a tiny town called Waterlooville an hour's train ride from London and met with the good folks at Deltair who are the experts on all British aeroplane engines. The place was impressive with rotary engines for the Shuttleworth Collection being worked on as well as a half dozen Spitfire engines in the que.

The plan was to have them build a zero time engine and ship it to Arizona, in the mean time Jack could continue to enjoy flying his plane. After many, many months the close to TBO engine was well past its 1000 hour TBO and the new engine was slowly being worked on. In October it was shipped directly to Gosshawk Unlimited in Casa Grande for the swap. Since the plane was going to be all apart Jack also replaced all the flexible lines and rebuilt the landing gear at the same time.



The new engine runs smoother, has a higher TBO, leaks a lot less oil, and the old girl has more pep in her step. It should be noted that Jack's Chipmunk was built by DeHaviland of Canada in Downsview, Ontario. It shares very few parts with the British Chipmunk with the exception of the powerplant and air screw which are the same. Jack isn't going to sell the old engine but will be returning it to the UK.

## **TERRY'S STEARMAN**

### **RECIEVES TRANSPLANT**

After nearly 20 years and 1400+ hours the Continental W-670 engine on the Stearman is being replaced.

We are installing an overhauled W-670 engine that was at one time on Steve McQueen's Stearman. This will be the third engine that has been on the airplane since we purchased it from Jack Pollack in 1991.

If anyone in our Chapter needs a used 220 hp engine for their airboat or if you need to man-up you Prius or other foreign made car, give Terry a call.





**Jack Pollack's Chipmunk with its Zero-time Gipsy Major Engine**



**Terry's Stearman Awaiting Engine Install**

## **ARMY AVIATION HERITAGE FOUNDATION**

*By Steve Wieneke*

Have you heard of the Army Aviation Heritage Foundation (AAHF)? <http://www.armyav.org/> Did you know we now have a Chapter here in the Valley? The AZ Chapter was started in January by Dave Sale a retired Army COL and Boeing Helicopters VP. He flew Cobras in Vietnam and later Apaches.

He invited me to join, so now I am the only Navy guy surrounded by Army aviation types. We already have 140 members. More importantly, we have a flying AH-1F Cobra. The AAHF has an FAA waiver to fly these aircraft for paid rides. You know the drill, the money goes to keeping them flying.

The legacy chapter in Georgia has several Cobras and Hueys along with an L-19. They gave us the Cobra to operate. They promised a Huey by now, but that has been held up. We are now looking for one independent of the legacy chapter. We are also in the process of putting together our air show schedule for 2016. Without a Huey or L-19 we can't put on the little demo the legacy chapter does, but we are going to fly in for static display and sell merchandise and rides to the public. We currently are flying paid rides a couple Saturdays a month out at

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Falcon. Heliponents donated hangar space and Flighttrials Helicopters also helps a lot providing office space and operations from their ramp. The CAF has also been a big. Help.

We are looking for new members, corporate sponsors and anyone that wants to get involved. A&Ps are always useful. The aircraft are bailed from the Army and are still on the Army register. So, we have to maintain them to Army standards. As you can imagine, that is a lot of work. We need a Secretary and Executive Officer. We have no web site yet so expertise there would be awesome. But like the EAA, there is a place for everyone. There are big plans so we need members.

Our goal is to create a museum in the image of CAF, and likely, right next to Airbase AZ. As the main focus of CAF is WW II, we are looking at making our focus Army aviation and Vietnam. Not even the legacy chapter has a physical museum. Mesa has identified the space at Falcon that they would lease to the AZ Chapter. We may have an architect lined up and Dave has identified about six Army helos around the valley and states that owners have committed to loaning them for display in the hangar. There is even some hope that we will get an early Apache from Boeing. They have already been very supportive with money and office equipment.

As a fixed wing guy I am making it my mission to locate fixed wing aircraft for us. Any L bird would be great. Legacy used to have a Mohawk and we would love to have one again for our chapter. Even an old U-21 King Air would be great so we can use it to support the Cobra at airshows. Ideally, an L-19/O-1 allows us to put on the flying demo the legacy chapter has been flying for years. But anything Army works. If we get the hangar up someday we will be looking for fixed wing aircraft owners willing to loan us their L bird for display in exchange for the free covered space. Training is provided by the legacy chapter. They are very generous out there, they trained three of our helo pilots in the

Cobra for zero dollars. That is a hell of a lot better deal than some flying museums.

## **EAA PERVERT PATROL**

As EAA approaches the 25th anniversary of EAA's Young Eagles program, we can celebrate the success it has been for nearly 2 million young people. One of the biggest reasons for this success is by volunteers making the flight experience a positive, memorable one.

Continuing that positive legacy means maintaining EAA's high standards that have been part of the organization since Paul Poberezny founded it 63 years ago. Last week, Young Eagles volunteers were sent information regarding some administrative changes that keep EAA in step with best practices that are common in youth education and recreation programs throughout the nation, ranging from scout programs to youth sports leagues.

The new Youth Protection Program, which was first introduced as a concept in newsletters during 2015 to Young Eagles chapter coordinators and pilots, as well as at AirVenture 2015, will involve many EAA volunteers who work with young people. It will include online best-practices training and a basic background check to create the safest environment possible for young people in our programs and to protect our volunteers.

This training is available, free of charge, to all EAA volunteers who work with youth and Young Eagles pilots, chapter coordinators, and field representatives. The training is located at [www.eaa.org/youthprotection](http://www.eaa.org/youthprotection). EAA encourages you to participate early, as we will require that all participants in EAA and EAA chapter activities that serve youth to have successfully completed the training by May 1, 2016. After that date, EAA and chapter programs for youth will require full compliance with the training and background checks.

The company working with EAA in this process, AmericanChecked, is among the

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leaders in the industry and works with many colleges, school districts, and governmental agencies. A top priority of the exhaustive process to select the right company to work with EAA and its volunteers is the safety and security of any data collected. We welcome questions and suggestions at any time at [feedback@eaa.org](mailto:feedback@eaa.org).

EAA's programs have earned an outstanding reputation because of the volunteers and our organization. We aim to maintain that reputation and instill the youth protection guidelines and culture that parents and guardians seek in all programs for their kids.



**Jerry Lane and His Taylorcraft Restoration Project First Engine Run January 31st**

### **WHAT IF I DON'T ADS-B EQUIP?**

Many aircraft owners and pilots are upset about the looming government mandate to equip with Automatic Dependent Surveillance-Broadcast Out (ADS-B). The requirement to be ADS-B Out compliant after Jan. 1, 2020, to fly in certain airspace, will undoubtedly impact many pilots.

The regulation is 14 CFR 91.225. It says that unless otherwise authorized by ATC, no person may operate an aircraft in Class A, Class B, Class C, and certain Class E airspace, or within 30 nautical miles of specifically designated airports, unless the

aircraft is equipped with certain ADS-B Out equipment.

The airspace affected by FAR 91.225 is similar to the airspace impacted by FAR 91.215 for transponder use, including an exception for aircraft that were not originally certificated with an electrical system or subsequently retrofitted and certified with an installed system. This includes planes like many original antiques, gliders and balloons. Qualifying nonelectric aircraft may operate within 30 miles of the Class D airports so long as they remain outside of Class B or C airspace and below the altitude of the ceiling

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of Class B or C airspace area designated for an airport or 10,000 feet msl, whichever is lower.

As to the airspace restrictions for other aircraft without ADS-B Out, again, operators must avoid Class A, B, and C airspace and not operate within 30 nautical miles of an airport listed in Appendix D. Also, pilots must not fly at or above 10,000 feet msl in Class E airspace, excluding the airspace at and below 2,500 feet above the surface. Also, in Class E airspace, pilots must not fly at or above 3,000 feet over the Gulf of Mexico within 12 miles of the U.S. coastline.

IFR operations will still be allowed for non-ADS-B equipped aircraft after Jan. 1, 2020,

as long as operations are conducted outside the defined airspace.

The equipment requirements for experimental aircraft and special light sport aircraft are unique. Experimental category aircraft and E-LSA aircraft don't require the installation of FAA-approved ADS-B equipment. However, the equipment installed must meet the performance requirements of the ADS-B TSO (technical standard orders). As for S-LSA aircraft, installations don't require the use of FAA-certified equipment, but any alteration to install ADS-B must be authorized by the aircraft manufacturer or a person authorized by the FAA.



**Pat and Mike McGarry's Cessna 185 at Payson After a Snowstorm**

### **E6B COMPUTER 75 YEARS OLD**

The E6B flight computer was introduced to the US Army in 1940. Few devices have been around this long, have had cameo appearances in Star Trek, and remain in use today. We think that's worth celebrating.

The E6B was the result of several years of development by US Naval Lt. Phillip Dalton in the late 1930s. When the design was finalized, the device was introduced to the Army in 1940. After the attack on Pearl Harbor, the US Army Air Forces placed its

first large order. The E6B was widely used during World War II, with more than 400,000 units built.

A flight computer had been developed earlier by Siegfried Knemeyer, a German aeronautical engineer and WWII pilot. However, the E6B is considered the definitive flight computing device.

The current E6B looks almost exactly the same as the first one manufactured 75 years ago. The only difference is that lighter materials, such as cardboard, aluminum, and



plastic, are now used in place of the original steel.

The front of the E6B features a logarithmic slide rule, which performs basic multiplication and division. The "whiz wheel" performs useful conversions between different units: gallons, miles, kilometers, pounds, minutes, seconds, etc. If you need to calculate the weight of a certain amount of fuel -- for weight and balance -- you simply position the wheel at the exact amount and look at the corresponding value. The front also contains windows for variations when converting calibrated airspeed to true airspeed, or indicated altitude to true altitude.

The back features another slide rule and wheel designed for computing ground speed and wind correction angle. It provides a graphic method of solving problems in trigonometry and displaying the answers in an accessible form.

The basic calculations of the E6B "whiz wheel" are featured on many devices, including some "aviator" watches, such as the Citizen Skyhawk and the Breitling Navitimer.

If science fiction is any indication, the E6B could be around well into the 23rd century. In the *Star Trek* episode "The Naked Time," Mr. Spock uses an E-6B to calculate the time of impact between the Enterprise and a planet.

## PK FLOATS RESURFACE

PK Floats is back in the business of building floats for aircraft after regaining certification from the FAA. The company had closed three years ago after the death of the owner Alton Bouchard. According to the company website, it was purchased in 2015 by SR Aviation. This purchase coupled with a substantial investment in the Lincoln, Maine facility breathed new life back into the company. Production was restarted in the fall of last year.

The company is now under the leadership of company president Patrick McGowan, a former Maine conservation commissioner and legislator.

The rebirth of the company was aided by improvements to the airport where PK Floats is located. The improvements are part of a larger project to bring new business into the region, including a nearby industrial park. The town invested \$65,000 to bring three-phase electric service to the area. The electric project was completed about two weeks ago. PK Floats has already built or sold half the 20 sets of floats it had targeted for 2016. It is also planning to expand its product line to include skis, and floats for two additional airplane types



**PK Floats Company is Back in Business**

# ThunderAds

## FOR SALE, ETC.

### T-34 MENTOR PARTNERSHIP.

This is a turn-key, established partnership in a very nice Beech T-34. Plane is hangared at Falcon Field. Contact Lynn Miller 602 448-7487 or 602 585-0795 e-mail [LynnMiller777@gmail.com](mailto:LynnMiller777@gmail.com)

### CESSNA 172'S FOR RENT

Two IFR Cessna 172s for rent at Chandler. Owned by Chapter member Pat McGarry. Contact Chris Hoel for more information and to schedule [birdgangft@gmail.com](mailto:birdgangft@gmail.com)

### PLANES FOR SALE

Cessna 170A and two Bonanzas. One is a V35B and the other an S model. All three are hangared at DVT and flying weekly. For contact info [EAACHAPTER1217@aol.com](mailto:EAACHAPTER1217@aol.com)

### '65 MOONEY

Very clean, 4000TT, 22 hours SMOH, \$41K with new annual, Goodyear hangar, Joe Hobbs [joseph.hobbs@cox.net](mailto:joseph.hobbs@cox.net) for more information

### RV-4 PARTIALLY BUILT KIT

\$13,500 Lycoming 0-290-D2 \$3,000 or \$16,000 for both. Bill Refrow 602-843-9862 [w7lov@cox.net](mailto:w7lov@cox.net)

### VANS AIRCRAFT RV WHEEL PANTS

Pressure recovery wheel pants. New never used, painted, or drilled \$400. Jack 480 695-4441

### GARMIN GDL39 PORTABLE GPS

ADS-B Receiver with free Weather and Dual-Link Traffic. Battery Pack with extra Battery included. Works with all Apple Products. Brand new in the box, \$400. Ken Roth 602-228-5000, or e-mail: [RothDevCor@aol.com](mailto:RothDevCor@aol.com)

### PULSE AUTOCYCLE

FAA got you grounded? Want a fun project that captures the thrill of flying? Jim Bede designed Pulse Autocycle for sale \$22,000., Arizona title and current registration. Curtis 602 710-4494 [azskybum@aol.com](mailto:azskybum@aol.com)

### LYCOMING 0-360 A1A

Engine built up for RV project never completed. Invested \$50,000. Price very firm at \$25,000. Martin Del Giorgio [delgiorgiopels@gmail.com](mailto:delgiorgiopels@gmail.com)

### CURTISS REED PROPELLER

Model 55511. 82" SAE 1 taper shaft. (Warner, Ranger, Maytag 604) Make me an offer, I want it gone. Patrick McGarry: 602-430-0140

### ESTATE SALE

Chapter member Marty Williams has flown west and his family is selling his Zenith 701 kit. Contact his son Keith at 480-998-4873.

### OIL COOLER REPAIR AND SALES

Chapter member owned. R & E Cooler Service 800-657-0977 [www.oilcoolersvs.com](http://www.oilcoolersvs.com)

### ANNUALS

Owner Assisted. Jim Moss 520-440-2191 [www.northside-aviation.com](http://www.northside-aviation.com)

### FLIGHT INSTRUCTION, ETC.

Fred Gorrell Designated Pilot Examiner: Airplane: Private, Commercial, Instrument, ATP, ME and Lighter than Air: Private and Commercial. 602-942-2255, Cell 602-418-2045, [fgorrell2@cox.net](mailto:fgorrell2@cox.net)

### HOMEBUILT AIRCRAFT CERTIFICATION

ABDAR Gary Towner 928-535-3600

### ANNUALS, RESTORATIONS, FABRIC WORK

Eloy Airport Julie White 520-466-3442

### AIRMEN PHYSICALS

Dr. Henry Givre AME, Chapter member and RV-4 owner. 520-836-8701

### MACHINE SHOP

High quality parts fabrication for homebuilts at a reasonable price. David Leverentz 520-898-4321

Want to see your aircraft-related ad here in the Thunderword?

Send an E-mail to:  
[EAChapter1217@aol.com](mailto:EAChapter1217@aol.com)