



The ThunderWord

Thunderbird Field EAA Chapter 1217

January 2016

Scottsdale, Arizona

PRESIDENT'S CORNER

Greetings from my corner of the hangar! At the November meeting, Charlie Spinelli gave a great presentation on the history of unmanned aerial systems or drones. Charlie also talked about his Rutan Vari-Viggen. It was interesting to see how developments in sophisticated hobbyist drones can help bring innovative, low-cost avionics to homebuilders.

Every January I look back on the previous year and review the highlight and low points. 2015 had a major trauma for me personally as I was diagnosed with stage 2b breast cancer early in the year. I worked closely with my AME Dr. Burr Ross in finding the best team of doctors to help me. After two surgeries and three months of radiation and recovery, I am cancer free. By following my AME's recommendations and keeping him updated on my progress, I was able to obtain an FAA Special Issuance Medical with only a 40-day interval between exam and getting my medical in the mail.

In December I went through a requal program of ground school, simulator and flying a trip with a check airman. They had changed a few things including the name of the airline while I was out! It feels pretty damn good to be back in the left seat with the shiny new paint jobs for the world's largest airline.

While in a "treatment program" you aren't allowed to fly even under Sport Pilot, so I didn't fly my Cub for nine months. It felt good to get the Cub out last month and go fly. My AME has a plane at Deer Valley, so you do have to play by the rules in case he drops by the hangar to see how things are going.

Curtis

JANUARY CHAPTER MEETING

The next meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, January 21, starting at 7 pm, at the Scottsdale Aviation Business Center, 15041 North Airport Drive. This month's guest speaker is former Beechcraft executive Jack Braly, who will be presenting a special program on the design, production and flying of the mysterious **Starship**. A big thanks to Tom Clements and Bill Unternaehrer for setting up this month's program.

Guests are always welcome!

MEET OUR GUEST SPEAKER

Jack Braly started with Beech in 1978 as an assistant to the group VP, moved up the ranks, and was president from 1990 - 1993. In 1990, Beech recorded its best year, turning out 433 aircraft and collecting \$1.1 billion in sales. Also, in 1990, the Starship won certification. While a fine aircraft, the Starship was expensive and, in an era of corporate cost-cutting, it proved difficult to sell. In 1992, Beech's 60th anniversary year, the company turned out its 50,000th aircraft.

Prior to Beech, Jack was involved as a nuclear physicist on the Skylab project, and post-Beech he has been president of both Rockwell-Collins, Sino-Swearingen and AAIA, the last incarnation of Adams Aircraft. He lives in Parker, Colorado, and spends winters in Surprise, Arizona. He is an experienced pilot, flew Mrs. Beech at times, and owns/flies his own F90 King Air. And, to boot, he is a very easy-going, approachable, friendly, guy! 74 years young.



Aircraft Exterior Lighting by Aircelle

PAINT TRIM THAT LIGHTS UP

What better place for a French company to unveil flashy exterior aircraft lights than Las Vegas? Aircelle, a Safran company, is demonstrating thin electric lights that can be used to display full-color graphics, logos, and messages on aircraft exteriors. If nothing else, it should increase the visibility and therefore the safety of business and airline jets flying at night. The company was exhibiting its products during the National Business Aviation Association convention in Las Vegas last year.

The lights, run by on-board electrical power, can be placed almost anywhere on an aircraft, from the fuselage and belly to engine nacelles and tail. The lights, no thicker than a decal, can be reprogrammed to change the message or color. They were tested on an Airbus A380 airliner earlier last year and were seen at the Paris Air Show. The idea for the lighting grew out of Aircelle's work placing detailed designs on airliner engine nacelles.

The electroluminescent marking solution is based on a multi-layer system which is as thin as a sticker. What is displayed is easily modifiable to different statements and logos; animation can be included in the display. The

system includes controls to activate or deactivate it. It provides exceptional visibility both day and night, in particular in poor visibility conditions (half-light, night, rain, fog, etc.). This innovative solution highlights airline logos and liveries, as well as promoting the air transport sector's growing number of joint marketing campaigns and event affiliations. The electroluminescent marking also is scalable to private jets and even sport aircraft enabling owners to personalize their aircraft with artistic designs. The sky's the only limit for this product.

CHAPTER 1217 HOLIDAY PARTY

This year's Chapter 1217 Holiday Party was one of the best attended events in its history. Ron and Sherrie Landon graciously opened the door of their home for this year's event. With an abundance of food, libations and live holiday music by The Sonoran Horns, it was a fun party!

VALKYRIE

It isn't all that often when a new design comes around where you think wow this is really cool, this one is the first one in a while for me. Looking more like a high-tech fighter than a light plane designed for private use, the

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Valkyrie by Cobalt Aircraft

Valkyrie from Cobalt Aircraft has just been launched. With a canard front wing, sleek aerodynamic shape and a turbocharged 350 hp engine, the new Valkyrie is claimed to be capable of traveling at speeds of up to 260 knots/300 mph and has capacity for up to five adults and their luggage.

Produced in two formats, the CO50 is a fully-certified version capable of being flown unrestricted and with an estimated delivery time of mid-2017, whilst the Valkyrie-X is a factory-built experimental-certified aircraft with an estimated production time of six months from the date of order.

A long time in the design and construction phases, the Valkyrie is the brainchild of David Loury, the founder and chief executive officer of Cobalt Aircraft, who has assembled a team of designers, builders, and service people in facilities in San Francisco, California, Paris, France, and Saguenay, Canada in preparation for construction and delivery.

"Ten years ago, I had a vision to disrupt the aviation industry with an innovative private aircraft, that is not only technologically sound and safe, but also design-centric and luxurious," said Loury. "Today, Cobalt is no longer just a prototype. It's a world class aircraft, complete with advanced safety, technology, and modern design features for travel-loving consumers and aviation enthusiasts." The Valkyrie uses a canard design which is a popular option for various

light aircraft, such as the Vertex Hybrid Drone, or other pusher-type aircraft, such as the P.1HH HammerHead, because it adds stability and improves lift, especially in less traditionally-proportioned aircraft.

Sporting a single, rear-facing, piston engine driving a three-blade carbon-fiber pusher propeller, the Valkyrie is claimed to be able to cover more than 1,400 nautical miles at 220 knots in economy cruise with a pilot and one passenger. This distance decreases as the number of passengers or speed increases, but even fully-loaded and traveling at maximum speed, the Valkyrie is still claimed to be able to travel more than 520 mi before refueling.

Also claimed to have the largest, single-piece canopy in the world, the Valkyrie's enormous, forward-tilting glasshouse cabin not only provides access to the leather-appointed interior, it also provides a 320-degree view for the pilot and passengers alike. The exterior is crafted from composites and is available in a range of colors, including dark hues Cobalt says are not normally easily achieved in such materials.

Decked out with a huge array of modern electronic displays on the instrument panel, there is also a specific space for an iPad. As for storage, Cobalt states that there is more than ample space for golf clubs, skis, and suitcases. Both models measure 30 ft long,

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30 ft wide and 10 ft high. For More Info: www.Cobalt-aircraft.com

Standard with retractable landing-gear, the Valkyrie models also come with an optional extra in the form of a rescue parachute. Deployable in case of catastrophic failure or complete loss of aircraft control, the parachute system is designed to lower the entire aircraft and its passengers safely to the ground.

Pre-orders have just been opened, and an experimental Valkyrie-X version can be had for US buyers as early as the middle of 2016 for a US \$15,000 deposit now and the remainder of the \$595,000 total when the craft is ready for delivery. The ultimate, fully-certified version will be available by the middle of 2017 and set you back around \$699,000, before options of course.



Fred Gorrell looking very stylish in his Chapter 1217 hat

I GOT MINE, DID YOU GET YOURS?

It's not too late to order your EAA "World of Flight" calendars for 2016 now! These beautiful calendars are a great addition to any home or hangar. Share the magic of flight with your friends and loved ones. Phone order your calendars today; call EAA Membership Services at 800-564-6322 Monday through Friday, 8 a.m. to 5 p.m. CST.

AIR CORPS LIBRARY NOW LIVE

More than 500,000 printable drawings, blueprints, and manuals for World War II and legacy aircraft are now available online

through the recently launched [AirCorps Library](http://AirCorpsLibrary.com) website.

Users will find a range of resources covering aircraft design, flight, maintenance, and restoration. Interest-based annual memberships, including Fighters, Bombers, and Classics, are available for \$50, \$50, and \$25 respectively.

The AirCorps Library plans to continue expanding its collection over time. For more information go to <http://aircorpslibrary.com/>

KINGMAN AIRPORT

SOLAR PLANT AXED

UniSource Energy Services has pulled the plug on plans to build a \$45 million, 20-megawatt solar power plant near Kingman Airport, and instead they are looking at other sites in Mohave County, a spokesman for the company stated.

Pilots from around the southwest had been very much opposed to the plan as the glare from the panels would blind pilots trying to land and takeoff. One pilot said it would be like burning flies with a magnifying glass when the beam concentrated on your plane.

Construction was to begin in February, contingent upon zoning changes and amendments to the county's general plan. That location is no longer part of the company's business plan, said Joe Barrios, spokesman for UniSource in Tucson.

Even though it has nothing to do with aviation, it was interesting to see the costs associated per megawatt hour:

- Wind in Arizona: \$180
- Wind in New Mexico: \$149
- Photo-voltaic solar fixed array: \$168
- Photo-voltaic solar single-axis array: \$186
- Coal fueled conventional power plant: \$125.
- Gas fueled conventional power plant (combined cycle); Intermediate usage: \$119; baseload usage \$88.

SECOND HUMAN POWERED PLANE FLIES

The Dead Simple Human Powered Airplane (DaSH) made its first flight on Saturday, December 5th at 7:32 a.m. at the Half Moon Bay Airport, just south of San Francisco, California. Described on the team's [blog](#) as a "just-for-fun, after hours project," the DaSH represents a culmination of more than 12,000 man-hours of work by hundreds of volunteers.

DaSH has a wingspan of 109 feet (33.3 meters) but weighs in at just under 100 pounds (45 kilograms), half the weight of the pilot. The first flight covered a distance of 764 feet (233 meters) in 37 seconds, and was described by chief engineer and test pilot Alec Proudfoot as "fantastic."

"It flew a lot easier and handled great," he said. "A bit of PIO (*pilot induced oscillation*) in the middle of the flight as I sorted out the handling." The flight was cut short when a flange on the vertical tail mount failed, but the landing was uneventful and the damage has since been repaired.

"We're very happy with how this first flight went, a long one for a brand new HPA, and we're looking forward to flying again soon," Proudfoot concluded.

AIRSHOW PERFORMERS OSHKOSH 2016

AeroShell Aerobatic Team – The AeroShell Aerobatic Team brings its four North American T-6 Texans to Oshkosh again for both day and night air show performances.

Luca Bertossio – Luca Bertossio is an Italian aerobatic pilot who performs glider aerobatics.

Jeff Boerboon – Nicknamed Screamin' Sasquatch, Boerboon takes his vintage biplane to new heights with a CJ 610 jet engine.

Bob Carlton – Flying the SubSonex jet, Bob Carlton displays the precise aerobatic capabilities he has become famous for in his jet-powered glider.

Matt Chapman – Matt flies the Eagle 580.

Kevin Coleman – Flying an Extra 300SC

Kirby Chambliss – Chambliss goes full throttle in his aggressive and explosive aerobatic routine in his Red Bull Edge 540

Kyle Franklin – Kyle Franklin's Dracula airplane is a one of a kind airplane with a classic theme, an appealing story, and a commitment to his fans that is rooted in creativity and passion.

Geico Skytypers – The World Famous GEICO Skytypers Airshow Team is a flight squadron of six vintage WWII aircraft performing precision flight maneuvers at select air shows across the US

Mike Goulian – Goulian will thrill spectators with his Extra 330SC.

Rob Holland – Flying the MX-2, Holland thrills spectators with his dynamic and breathtaking display.

Jerry Kerby, Jerry "Jive" Kerby demonstrates the capabilities of his RV-8 *Wild Blue*.

John Klatt – John Klatt will thrill air show spectators with the MX-S. .

Greg Koontz – Koontz will perform in the Xtreme Decathlon.

Sammy Mason – Mason is a third generation aerobatic pilot treating crowds to a special show with his Pitts S-1S

Paul McCowan – Skydiver with the American flag

Patriot Parachute Team – The Patriot Parachute Team is a team of professional parachutists who formerly served as active duty Navy SEALs

Jim Peitz – Peitz performs incredible low-level maneuvers in his aerobatic F33C Beechcraft Bonanza.

Rex & Melissa Pemberton – Melissa flies her Edge 540 aircraft while her husband Rex jumps out in his wingsuit and the two fly together in formation in this unique performance.

Kent Pietsch – Flying an Interstate Cadet Kent is best known for a comedy act that features a detached aileron (wing flap) and a mesmerizing wingtip-scraping pass down the runway that you must see to believe.

Skip Stewart – Stewart delights his audience with a high-energy solo demonstration flight in his highly modified Pitts S2S biplane, Prometheus.

Gene Soucy & Teresa Stokes – Soucy flies his iconic Grumman Showcat biplane delivering a Hollywood-style smoke and noise solo routine, a wing-walking act with Stokes, and a night pyrotechnic performance called the Fireflight

Team Aerostar – The Aerostars team performs in the Yak 52TW, a former Soviet-designed, Romanian-built, aerobatic trainer..

Bill Stein – Stein flies the dazzling Zivko Edge 540, whose paint continuously changes color based on constantly varying angles between spectators, airplane, and lighting.

Team Redline – RedLine Airshows is a dynamic two-ship formation aerobatic performance team.



Goshawk Unlimited had an interesting project over the holidays. Doing some work on an F-16 that folds up and fits in a trailer. It is used for recruiting.



The F-16 Hauler

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

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

PLANES FOR SALE

Christmas is just around the corner and any of these planes will look good under the tree. 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

'65 MOONEY

Very clean, 4000TT, 22 hours SMOH, \$41K with new annual, Goodyear hangar, Joe Hobbs 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

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

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

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

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

ANNUALS

Owner Assisted. Jim Moss 520-440-2191 www.northside-aviation.com

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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

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Eloy Airport Julie White 520-466-3442

AIRMEN PHYSICALS

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

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