



# The ThunderWord

Thunderbird Field EAA Chapter 1217

November 2015

Scottsdale, Arizona

## PRESIDENT'S CORNER

Greetings from my corner of the hangar! At the September, meeting Jerry Johnson from the Phoenix Sky Harbor Air Traffic Control Tower talked about all the recent developments at Sky Harbor. It was great to meet a guy that had as much enthusiasm for his job after 20-plus years as a controller. Chapter member Lynn Miller is a friend of Jerry's and was nice enough to arrange for his speaking to our Chapter.

Last month was the Copperstate Fly-In and it was a very successful event. Congratulations to Chapter 1217 member Rodney Jarrell for taking home the Grand Champion trophy for his beautiful RV-10. I will try to twist Rodney's arm to get him to speak at one of our meetings next year. That's right, this month is the last meeting of 2015. In December we have the Holiday Party in lieu of a monthly meeting. Hopefully everyone is marking their calendars to leave December 12 open for the party.

Jack Pollack found this month's guest speaker as he was moving his Vari-Viggen into the hangar behind Jack. The plane has always been one of my favorites, as it is one of the cornerstone homebuilts that formed the foundation for homebuilts today. The owner of the plane is as interesting as his flying machine, and we were lucky enough to get him lined up to speak at this month's meeting.

See you at the November meeting!

*Curtis*

## NOVEMBER CHAPTER MEETING

The next meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, November 19, starting at 7 pm. The location

is the Scottsdale Aviation Business Center, 15041 North Airport Drive. This month's guest speaker is Charlie Spinelli who owns a Rutan Vari-Viggen based at DVT. Charlie is the head of Unmanned Aerial Systems for Boeing and is going to talk about the latest developments in UAS aircraft, as well as talk about his Vari-Viggen.

Guests are always welcome.

## MEET OUR GUEST SPEAKER

Charlie B. Spinelli is a Boeing Associate Technical Fellow with a background in aviation, physics, and computer science. Before coming to Boeing, Charlie spent 15 years starting in 1983 as a weather research pilot/engineer on the High Altitude Research Platform (HARP) supporting missile testing at the Kwajalein Missile Range, Marshall Islands. From 1983-1991 he was the systems engineer and a test pilot for the U.S. Army funded Autonomous Unmanned Reconnaissance Aircraft (AURA), an optionally piloted unmanned aircraft designed to perform meteorological reconnaissance, optics support, and communication relays at the national test ranges. He was the test director & mission manager of the High Altitude Observatory, a Gulfstream II-B that collected data for National Missile Defense tests. He was also the systems engineer on the Airborne Field Mills program at the Kennedy Space Center that collected electrical field and microphysical data on convective clouds in support of Shuttle Launches. Hired by Boeing in 1997 to work as the mission planner, flight test conductor and analyst on Boeing's 767 Airborne Surveillance Test bed. Later he worked on the Airborne Laser program and several

Continued on page 2

programs that included Class I, II & III unmanned aerial systems.

Working with the U.S. Army and the University of Washington's Departments of Genome Sciences and Electrical Engineering, Charlie instrumented his homebuilt aircraft, a Rutan Vari-Viggen, as a surrogate unmanned aircraft to successfully flight test a state of the art technology that can detect chemical/bio-terrorism weapons. Currently he is the chief engineer of commercial autonomous systems that is developing the use of commercial unmanned aerial systems in precision agriculture, firefighting & infrastructure monitoring. Charlie is also a member of the Department of the Interior's TransTAC UAS Technical Working Group (TWG) that is advising DOI on UAS export issues.

Charlie holds FAA single & multi-engine instrument pilot ratings, is a licensed airframe & power plant mechanic, and is an experimental aircraft homebuilder. He currently has 21 patents, 20 patents pending on aviation safety, unmanned systems, atmospheric research and remote sensing.

He also has papers published in eight scientific journals. He has worked at the Australian Research Centre for Aerospace Automation (ARCAA) in Brisbane, Australia and in Europe developing and testing autonomous unmanned systems. His professional affiliations include the Society of Flight Test Engineers, Association of Unmanned system International, EAA, AMA, American Meteorological Society, SPIE, AIAA.

## **CHAPTER 1217 HOLIDAY PARTY**

Ron and Sherrie Landon have set Saturday, December 12, 2015, as the date for our annual EAA Chapter 1217 Holiday Party. This is the sixth time they have hosted the event at their home near 48<sup>th</sup> Street and Indian School Road. There will be live music, food, libations and lots of your Chapter 1217 friends, so plan to attend. Mark your calendar and plan on bringing your significant other. In December we will start e-mailing and mailing out more information on how you can get involved, what to bring, as well as a map to the party!



**Dennis Smith's Sonex at Fuel Stop, with F-4 Phantom in back ground**

## SONEX XC TO JOHNSTOWN PA

By Dennis Smith

This October I flew my little Sonex to Johnstown, PA to visit my brother and sister-in-law. The trip was delayed a couple weeks to allow Hurricane Joaquin to clear out. By that time Arizona and New Mexico were pretty wet, but I figured if I could make Texas I'd be OK. As it turns out, it took two days to get out of New Mexico as the combination of high terrain and low ceilings made IMC in the eastern half of the state. The third day I sampled the strong, gusty Oklahoma panhandle winds (18G24kt at Guymon) before encountering quite nice weather across Kansas, Missouri and into Illinois. After spending the night in Sparta, Illinois, I stopped in Indiana, Kentucky and West Virginia on my way to PA. Going into Parkersburg WV the tower told me my radio was scratchy and unreadable, but gave me landing clearance, which I acknowledged with a scratchy, unreadable response.

I used my handheld to talk to the tower on departure and listened on my panel radio, no

problem. Johnstown had trouble hearing me too, but communication was adequate and they were to be the last tower controlled airport I visited until Deer Valley.

I had a really nice visit with my family. They showed me around the town I was born in and one day my brother and I visited the Flight 93 Memorial. It is quite impressive. We need to remember what those Americans did for all of us.

On the return trip I saw a variety of weather, low ceilings, clear skies, smooth air, light to moderate turbulence, head winds, strong gusty cross winds, and even some rain showers. One of my goals on the trip was to stop at a bunch of small airports. These are the backbone of general aviation and each has its own character. I met a bunch of nice people at these airports. I stopped every hour and a half to two hours. This is a comfortable range for the airplane with good reserve, and its pilot, who likes to stretch now and then. Oh, and upon my return to Deer Valley they heard my radio loud and clear from 20 miles out. Go figure.



**Dennis Crossing the Mississippi**



**Dennis Over Johnstown, Pennsylvania**

## NEW AIRCRAFT ENGINE

One of the news worthy items out of AirVenture 2015 was the development of a new engine in Denmark. The D-MOTOR as it is called was originally designed for small homebuilt helicopters and gyrocopters that seem to rapidly gaining popularity in Europe. The engine produces 95HP and the target

price is \$17,900 Yankee dollars. The engine is a very compact flat-head, four cylinder, four stroke, liquid-cooled, 2600 cc, direct-drive engine developing 93 HP. It only weighs 124 lbs fly away weight. It has electronic ignition, fuel Injection, and a 2000 hr TBO. Sipping only 3.2 GPH fuel burn of either 100 LL or car

Continued on page 4

gas, it is very affordable to fly. The engine claims to only have 35 moving parts. It is comparable to the Rotax 912 but for \$10,000

less. The D-Motor produces 220 Nm of torque at only 3100 rpm compared to the Rotax which produces 140 at 6000 rpm.

### COPPERSTATE FLY-IN AWARD WINNERS

<b>Grand Champion Custom Built</b>	N104AZ Vans RV-10	Rodney Jarrell, <i>Phoenix, AZ</i>
<b>Reserve Grand Champion Custom Built</b>	N615SV Vans RV-7	Stephen Olejnik, San Diego, CA
<b>Grand Champion Restoration</b>	N17734 1937 Waco YKS-7	William Wold, Casa Grande, AZ
<b>Reserve Grand Champion Restoration</b>	N78103 1946 Glove Swift GC-1B	Karl Johanson, San Diego, CA
<b>Custom Built Metal</b>		
1st Place	N104AZ Vans RV-10	Rodney Jarrell, Phoenix, AZ
2nd Place	N615SV Vans RV-7	Stephen Olejnik, San Diego, CA
<b>Custom Built Composite</b>		
1st Place	N400EZ Long EZE	David Devere, Parker, CO
2nd Place	N621WV Arion Lightning	John Drane, Laveen, AZ
<b>Custom Built Best Tube and Fabric</b>	N121WH Just Aircraft JA-30	Jutch Hudgens, Helena, MT
<b>Best Wood</b>	N951JT BY-20 MiniCab	John Toddhunter, Hemet, CA
<b>Best Plans Built</b>	N400EZ Long-EZE	David Devere, Parker, CO
<b>Classic</b>		
1st Place	N2584C 1954 Cessna 170B	Wiley Moreman, Wilcox, AZ
2nd Place	N77708 1946 Funk B85C	Keith Olsen, Scottsdale, AZ
<b>Contemporary</b>		
1st Place	N5864B 1956 Cessna 182A	James Kavanaugh, Gilbert, AZ
2nd Place	N9779R 1960 Beechcraft M35	Dale Rhodes, Aztec, NM
<b>Best Antique</b>	N17734 19337 Waco YKS-7	William Wold, Casa Grande, AZ
<b>Military</b>		
1st Place	N202LD NA-50/P-64	Jeff Pino, Chandler, AZ
2nd Place	N64648 1943 Boeing B75N1	J. T. Stewart, Phoenix, AZ
<b>Best Cessna Showplane <i>sponsored by</i></b>		
<i>Cessna Flyer Magazine</i>	N2584C 1954 Cessna 170B	Wiley Moreman, Wilcox, AZ
<b>Best Piper Showplane - <i>sponsored by</i></b>		
<i>Piper Flyer Magazine</i>	N5297P 1958 PA-24-250	Anthony Morettri, Deming, NM

### EAA Chapter 1217 Personnel

President	Curtis Clark	602 710-4494	<a href="mailto:EAChapter1217@aol.com">EAChapter1217@aol.com</a>
Vice President	Terry Emig	520 836-7447	<a href="mailto:terry@valleypumpandmachine.com">terry@valleypumpandmachine.com</a>
Secretary/Treasurer	Jack Pollack	480-695-4441	<a href="mailto:Jack.Pollack@Analyticalgroup.com">Jack.Pollack@Analyticalgroup.com</a>
Newsletter Editor	Ron Kassik	480 948-0168	<a href="mailto:ronkassik@cox.net">ronkassik@cox.net</a>
Young Eagles	YOUR NAME - HERE POSITION OPEN		
Technical Counselor	Dan Muxlow	480 563-4228	<a href="mailto:N27DM@cox.net">N27DM@cox.net</a>



Photos by Bernie Gross

**Copperstate Grand Champion RV-10 owned by Chapter member Rodney Jarrell**



**Rodney Jarrell's RV-10 Tail Art**



**Part of Fuselage Paint Job**



**Rodney Jarrell's Grand Champion RV-10 Fuselage Artwork**



**Burt Rutan's New Seaplane the "Ski Gull" Undergoing Testing in Idaho**

# 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

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](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)

**Thunderbird Field  
EAA Chapter 1217  
5450 East Voltaire  
Scottsdale, Arizona 85254**

