



The ThunderWord

Thunderbird Field EAA Chapter 1217 September 2013

Scottsdale, Arizona

PRESIDENT'S CORNER

Greetings from my corner of the hangar! At the August meeting, John Rader told the story of the Tucson Soaring Association. More than just talking about gliders, he went into the history of El Tiro Airport and the surrounding fields as well as the changing political climate that the club is dealing with. A big thanks to John for stepping up to the plate and putting together a presentation to share with us.

This month's speaker is one of those guys who are few and far between. He is one of the pioneers in the world of turbines. He is a longtime valley resident who developed, built, and flew the first small turbine engine used on RC models. He has since gone on to develop some really unique turbines and turbo prop engines that might power the homebuilts of tomorrow! It should be a great meeting.

I have been temporarily suspending operations in the workshop as the air conditioning can't keep up with the outside temps. I am hoping to have the cowlings done for the Wickham B this month and in the air for Copperstate in October.

See you at the September meeting!

Curtis

SEPTEMBER CHAPTER MEETING

The September meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, September 19, starting at 7 pm, in the Scottsdale Aviation Business Center. This month's guest speaker will be Bryan Seegers of Azmark AERO Systems, who is going to talk about the small turbine engines he has developed.

In addition to this month's speaker, Barbara James from AC Air Technology – www.acairtechnology.com. – is going to bring an aircraft tug for us to look at. This very small but powerful tug can move planes from RV size up through Turbo Commanders:

- Works for any fixed wing aircraft weighing up to 5,000 lbs
- Tows approximately 60 minutes on a 2-hour charge
- Remote Control allows better visibility of wing tips & entire aircraft
- Dual Rate Speed for maximum control when parking in tight spots
- Fail Safe Radio Controls
- Model T1C safe for Cirrus and other 'wheel fairing' type aircraft
- Emergency Shut-Off Feature

Guests are always welcome!

SPEAKER BIO

Bryan Seegers serves as Chief Scientist of Azmark Aero Systems LLC. Mr. Seegers has been involved with the design, manufacture, testing, and analysis of turbine engines and their components for 25-plus years. He was an Owner/Founder of M-DOT Inc. and served as its Chief Scientist and Vice President of Engineering. Mr. Seegers was responsible for the development of the M-DOT turbomachinery business pursuits and development of engineering proposals.

Bryan got his start many years ago when he tried to build his first turbojet engine while he was in the fourth grade. It consisted of two cat food cans, tin lids cut and twisted to form a three-stage axial flow compressor, and two-stage axial flow turbine, a threaded-rod shaft, and jam nuts to hold it all together. In his own words, "It didn't run." Today, Seegers runs a

Continued on page 2

cutting edge aerospace company that he started to commercialize his S-100 micro-turbojet and which continues to specialize in micro-turbine machinery. At the time, he had a great deal of difficulty getting the hobby world interested, primarily due to his projected price of \$2,200, so he changed focus to other areas of micro-turbine technology, taking on a number of government and university projects.

In 1978, Seegers laid out his concept for his first micro-turbojet engine. The one which finally flew in 1988 was little changed from that design. In the interim period, he took three years off from his micro-turbojet project to build a full-size composite aircraft called the "Dragonfly." He then attempted a redesign of his turbojet engine, only to return to his original concept.

The challenges facing such a complex project were many, but a few stand out. Seegers had designed and built a number of engines before settling on a final design for the flight article. He wanted the flight version to burn gasoline in lieu of propane. Redesigning the burner to accomplish this proved to be one of the toughest challenges. Another significant challenge was working out the shaft dynamics on the bearing system. In terms of integrating the engine and airframe, the biggest hurdle was the fuel system. Nearly everything from the stainless steel fuel tanks to electronic controls had to be designed and built from scratch. He even designed and built a drum brake for the nose wheel.

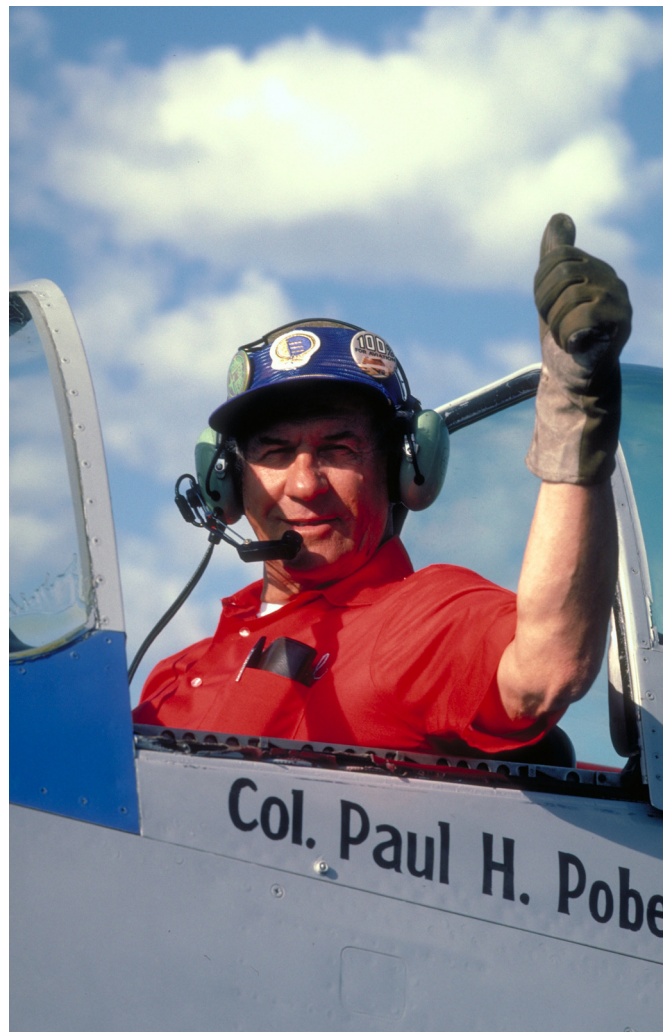
On July 30, 1988 Bryan Seegers and his team made their own contribution to model aviation history when they became the first in the US to successfully fly a radio controlled model aircraft powered by a micro-turbojet engine.

Today Bryan works for Azmark Aero Systems developing small and micro turbines that will someday replace the internal combustion engines we have in our planes. Check out www.azmark.aero for some cool videos of their turbines running.

EAA FOUNDER

PAUL POBEREZNY FLIES WEST

The man who started the EAA, Paul Poberezny, passed away at age 91 this past month. Paul inspired, challenged and motivated many, fostering a spirit of collaboration and a camaraderie that to this day symbolizes the EAA culture. The impact of his efforts and style, his beliefs and vision, can be felt across the broad aviation community. I am glad that he was able to enjoy Oshkosh this year, experiencing renewed spirit and enthusiasm, camaraderie and passion. I will always see his thumb-up greeting – anything is possible! He truly helped us believe this, each in our own way! Blue skies, Paul.



Paul Poberezny at the Controls of a P-51



Curtis Ran into an Old Friend at Oshkosh

CURTIS CLARK'S FIRST FLYING JOB

This Beech G-18S was my first flying job, flying freight, it lasted for 1100 hours and three years. The old girl has been restored to better than new condition and no one would ever guess all the nasty oily freight ramps it used to call home when it was owned by Coast Airways.

JETPACK ON THE HORIZON

A jetpack prototype developed in New Zealand can undergo manned test flights after aviation authorities gave its developers a flying permit. The chief executive of Martin Aircraft said the certification was a significant milestone in the development of the jetpack.

The company hopes to start rolling out some models next year. Inventor Glenn Martin began working on the jetpack in his Christchurch garage more than 30 years ago,

inspired by childhood television shows such as Thunderbirds and Lost in Space. He aimed to create a jetpack suitable for everyday use by ordinary people with no specialist pilot training. His jetpack consists of a pair of cylinders containing propulsion fans attached to a free-standing carbon-fiber frame. The pilot backs into the frame, straps himself in, and controls the wingless jetpack with two joysticks. The jetpack comes with a rocket-propelled parachute if anything goes wrong. The company has been fine-tuning the prototype to turn it into an aircraft that is safe and easy to use.

The latest prototype, the P12, incorporated huge design improvements over earlier versions. "Changing the position of the jetpack's ducts has resulted in a quantum leap in performance over the previous

Continued on page 4

prototype, especially in terms of the aircraft's maneuverability," Mr. Coker said. The company is preparing a specialized version of the jetpack designed for the military and first-responder emergency crews.

The price of your own personal flying machine is estimated at \$150,000 to \$250,000 which places it about the same price as a Carbon Cub.

A YANK IN THE LUFTWAFFE

We received an interesting e-mail from Robert Ricard about a book he has written. Robert learned to fly at age 13 and got his Private License at 18. He has written a book which should be of interest to all pilots as well as those interested in aviation. It is available on Amazon Kindle, and Barnes and Noble Nook Books as an ebook. The book is not available in print and he doesn't know if it ever will be because it is virtually impossible for an elderly, unknown author to get a book published by a traditional publisher. Robert is 77 years old. Below is a plot description

Plot Description

Entitled "A Yank in the Luftwaffe," the book is a fictional novel, a suspenseful thriller, that takes place in German-occupied France during World War Two. It begins with fighter pilot Major Erich Berger, U.S. Army Air Corps, in a dogfight with a German fighter plane. Both planes are damaged by gun fire and make a forced landing in the same field. Berger gets out of his plane and walks to the German plane where he sees the pilot slumped over the instrument panel with a head injury. Berger pushes the pilot back in his seat and is shocked to see his identical twin brother Hans. They were born and raised in Germany, but their parents were anti-Nazi and emigrated to the U. S. before Hitler took complete power. But Hans had been brain washed by the Hitler Youth Movement and refused to go with his parents and Erich. He went to live with an aunt and uncle who were pro-Nazi. Hans dies of his injuries while Erich is watching him. A member of the French Resistance and an American OSS agent walk up to the plane.

The OSS agent talks Erich into impersonating his brother in the German Air Force, the Luftwaffe. But Erich comes under the watchful eye of the Gestapo, Hitler's dreaded secret police, for Hans had recently written a letter to his girlfriend severely criticizing the Luftwaffe high command, the letter considered anti-Nazi. But the Gestapo is not the only peril Erich faces because Hans is hated by another Luftwaffe pilot for being responsible for the death of the pilot's father at the hands of the Gestapo. And, Erich is also in danger working with the French Resistance to defeat Germany. In his early stages of working with the Resistance, he falls in love with a beautiful female member of the Resistance who saves his life one night. The book is a nail biter with no boring segments.

The book is available on Amazon Kindle, and Barnes & Noble Nook Books for \$4.99. Bob's first book, "Deep Selection," a murder mystery based on the U.S. Navy Tailhook scandal in 1991, is also available on Amazon Kindle.

About the Author

Robert V. Ricard is a retired U.S. Coast Guard lieutenant commander. (Unknown to many, the Coast Guard is part of the U.S. Armed Forces.) He learned to fly at age 13 at the Detroit City Airport and got his Private License at the age of 18. He has been a student of World War II history for years, in particular the war in Europe. He was awarded the Coast Guard Commendation Medal and the Coast Guard Arctic Service Medal, the latter for operations north of the Arctic Circle while serving aboard a Coast Guard ship out of the Aleutian Islands. His primary duty was navigator. He served on that ship during the Cold War with Soviet Russia. On the Bering Sea, one of the roughest bodies of water in the world, Soviet Russian trawlers, which were actually armed spy ships, tried to collide with U.S. Navy and U.S. Coast Guard vessels to provoke a Cold War incident. One night in thick fog, six Soviet trawlers surrounded Ricard's ship.

Continued on page 5

Ricard had them on radar and when the trawler on his starboard side was slowly closing in, Ricard was able to maneuver out of the encirclement. He later became an experienced investigating officer in the field of marine safety and wrote many investigative reports. His last assignment was executive officer (2nd in command) of the Coast Guard Marine Safety Office, Detroit, with three extended periods as acting commanding officer. He is a life member of the Military Officers Association of America and the Veterans of Foreign Wars. He is a member of The American Legion and the Royal Canadian Legion. After his retirement from the Coast Guard, he had several articles published in boating magazines, and he was a contributing editor of "Lakeland Boating" magazine. The "Detroit News" published an article Commander Ricard wrote in early 1976 on the sinking of the SS EDMUND FITZGERALD in Lake Superior in November of 1975. He lives with his wife, Christine, in Eastpointe, Michigan, a suburb of Detroit.

EAA CHAPTER 403 RAFFLE

EAA Chapter 403 Carson City, NV, is holding a Raffle to expand their chapter facility. They have run out of room for their Young Eagle projects. One of their Young Eagle programs is building a Zodiac 601 aircraft. They are presently building a wing in a 12' X 18' room. They hope to generate enough money to construct a small hangar so they will have room to build this project.

"We would appreciate it if you would support us in this effort by purchasing tickets and forwarding this e-mail to your friends and fellow EAA members."

The Raffle prize is \$5,000.00. The Tickets are \$20.00 each. Purchase six for \$100.00. The drawing will be held October 2, 2013 at their October Chapter Meeting. To purchase a ticket call 775-882-1237. Leave message if no answer.

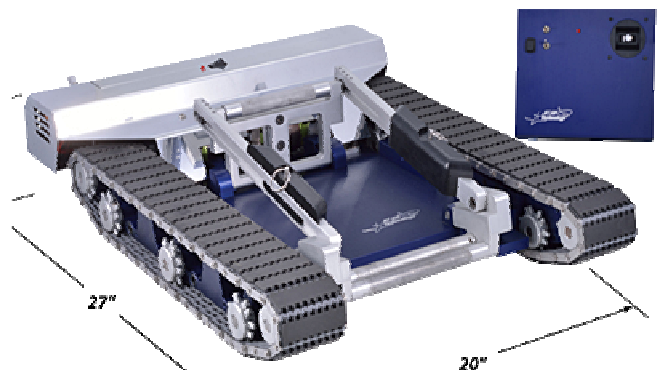
Check out their Web Page EAA403.org The rules for the drawing are listed at EAA403 Rules: <http://www.eaa403.org/newsite/rules.asp>.

For more information contact: Robert Dickinson, President, EAA Sierra Chapter 403, Carson City, NV 775-882-1237."

CLEVELAND SURVEY

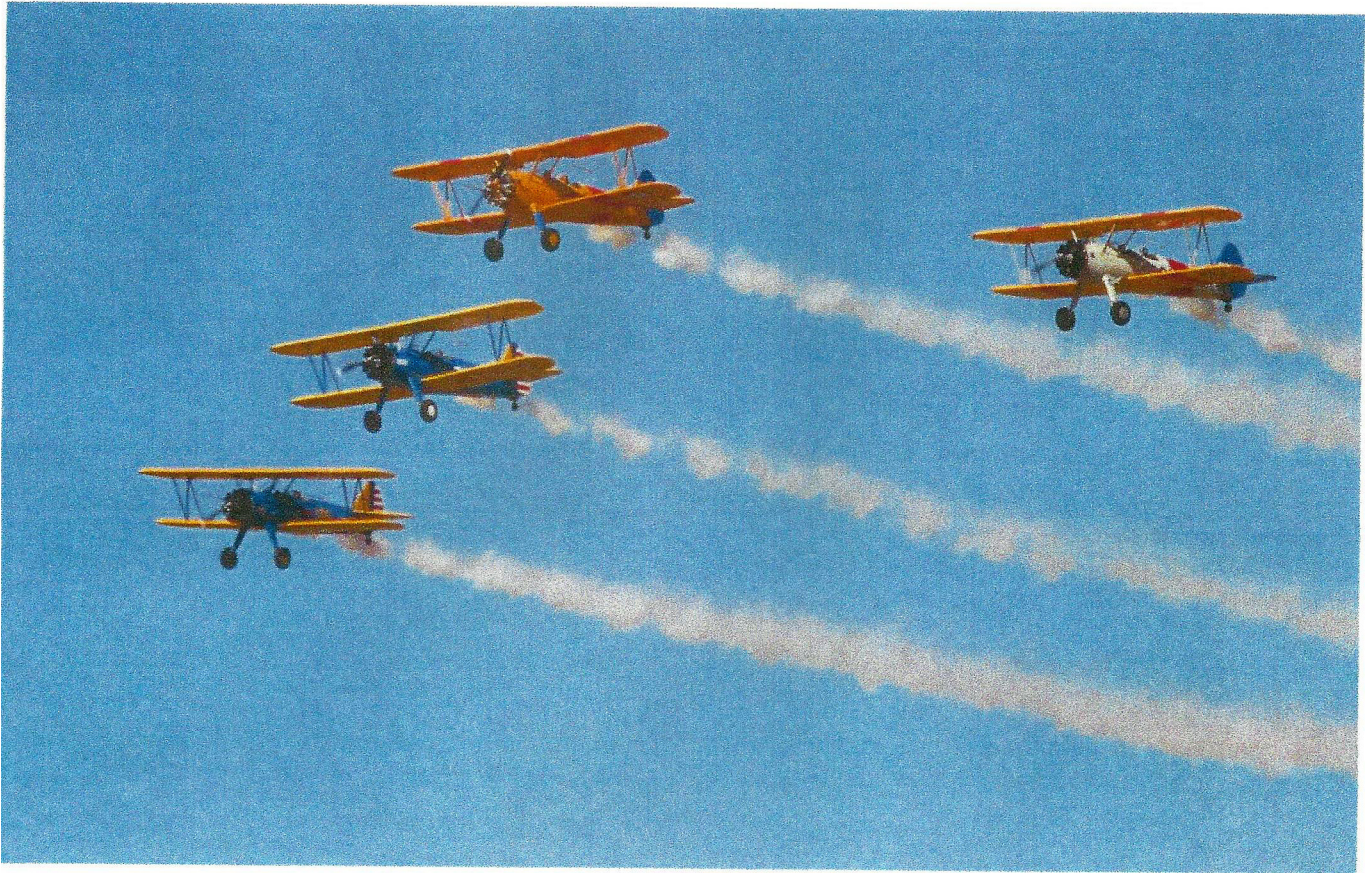
Cleveland Wheels & Brakes, a division of Parker Aerospace (an EAA sponsor), is conducting a customer feedback survey. They are trying to gain customer feedback on wheel and brake products and information about their market. With this information they'll be able to identify where they need to improve and what their customers want, which will eventually let them serve customers better. If you complete the survey you will be automatically entered into a drawing for a **new iPad (a \$330 value)**. The survey itself **won't take more than 5 minutes of your time**. Your responses would also help an American aviation related business."

The survey can be found at: https://www.surveymonkey.com/s/Cleveland_wheels "Your responses would be greatly appreciated. If you have any concerns or questions about the survey, our business or products, please don't hesitate to contact me. My contact information is listed below. Thank you in advance for completing the survey." Roman Boychuk, Engineering Department. Cleveland Wheels & Brakes, roman.boychuk@parker.com



Remote Controlled Aircraft Tug

AC Air Technology will be at our next meeting to demonstrate their remotely controlled aircraft tug. Come and see how it works.



City of Casa Grande Municipal Airport
3225 N. Lear Ave., Casa Grande, AZ 85122

End of the Month, Saturday Fly-In Pancake Breakfast

Pancakes, Sausage, Scrambled Eggs \$8.00

City of Casa Grande Municipal Airport Terminal Building

Hosted by the Pinal Masonic Lodge #30 F & A M

Serving Breakfast from 7:00 a.m. until 10:00 a.m.

Open to the community / Plenty of Car and Motorcycle parking

<http://www.casagrandeaz.gov/web/guest/airport>

**Visit our website for additional information on the
City of Casa Grande Municipal Airport**

ThunderAds

FOR SALE, ETC.

LYCOMING O-360 A1A

Engine built up for RV project that never got off the ground. Invested \$50,000. Price is very firm at \$25,000. Martin Del Giorgio delgiorgiopels@gmail.com

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.

CURTISS REED PROPELLER \$4,000 Model 55511. 82" SAE 1 taper shaft. (Warner, Ranger, Maytag 604) Patrick McGarry: 602-430-0140

PROJECTS FOR SALE

Protech, PT-2, folding wings & trailer, 82 hp Mosler engine. & Gere bi-plane, about 75% complete, built from magazine plans, circa 1932, completely rebuilt Model A engine. Pat Wall 928-851-2244.

2009 LANCAIR 360

Superior IO-360 engine, TTAFE 20 hours, mineral oil, every thing new including paint, GPS, loaded must see. Mary Shragal 630-897-7706

COMBINATION VHF/GPS ANTENNA

Comant Model CI 2480-201, Separate connectors for Comm and GPS. Never installed. See AS&S pg 616. Their price \$568.75, sell for \$250.00 Ron Kassik 480-948-0168 or ronkassik@cox.net

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Jim Berdick AI 623 293-2708

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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

MACHINE SHOP

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

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