



The ThunderWord

Thunderbird Field EAA Chapter 1217

September 2015

Scottsdale, Arizona

PRESIDENT'S CORNER

Greetings from my corner of the hangar! Last month Ralph Morris entertained a sparsely attended meeting with a talk about his patented Safety Aileron System. The system basically allows an aileron to only go up so the plane remains in coordinated flight when it turns by eliminating the adverse yaw inducing down aileron.

As I continue to prepare my Wickham B for the trip to the paint shop, I kept running across nut plates that seem to have given up the ghost. I guess who could blame them - they are 50 years old! My research into replacing them is in two small articles that you might find useful. The Click Bond people were giving out free samples at Oshkosh and I picked up a couple. One of them was an all carbon fiber nut plate that weighed nothing and was really cool. Unfortunately, when I went to order some, I found they were F-35 parts and cost \$200 apiece! The F-35 has over \$60,000 in nut plates per aircraft. I reigned in my enthusiasm and ordered a hundred of the 6/32 in steel, which were a little on the pricey side.

I also took the advice of several fellow Chapter members and replaced my trusty Makita portable drill with a brand new air drill from Avery Tools. The difference is amazing and it makes drilling out old rivets a piece of cake. I also invested a couple of dollars in some new #30 bits, which is a great improvement over the vintage Boeing surplus bits I had. This air drill was one of my better investments and it is a blast to use - and it even sounds cool! See you at the September meeting!

Curtis

SEPTEMBER CHAPTER MEETING

The next meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, September 17, starting at 7 pm. The location is the Scottsdale Aviation Business Center, 15041 North Airport Drive. This month's guest speaker is Chapter member Jim Moss. He is going to talk about being a charter pilot in the wilds of Alaska.

Jim lives and breathes EAA; he is the current President of EAA Chapter 538, where he hosts the biggest Young Eagles program in the state. Recently Jim twisted a few arms and hosted the very successful EAA Ford Trimotor. Come on out and meet Jim and hear his interesting tales of flying in Alaska.

Guests are always welcome!

VINTAGE NUT PLATES

If you are restoring an antique aircraft to its original state, it is sometimes hard to find original parts. Nut plates are always a problem because the big suppliers want to sell you the current GA type and not what is on your plane. Well now there is a major source for original "Vintage Nut Plates." Lance Aircraft and nutplates.com have teamed up to inventory virtually every type of nut plate made.

They are a family-owned business, established in 1967, with a vast collection of over two million nut plates from 45 years of collecting surplus aircraft parts inventories from all over the world. Lance Aircraft was established in 1967. Within its first year, Lance Aircraft made a large overseas acquisition of military surplus AT6's and Harvards, along with substantial spare parts

Continued on page 2

inventories. Originally, their primary purpose for buying these inventories was to support the agricultural crop dusting industry.

In addition to having many of the current standard nut plates in stock, they stock many of the original Vintage Nut Plates made by "ESNA," "BOOTS," "UNITED-CARR," and other nut plates manufactured in the 1940's and later. Some of these nut plates have not been made for years and are hard to find. Over two million Vintage Nut Plates are "In Stock"!

Styles Available

- With Fiberlock/Elastic Inserts
- With Metal Locking Inserts
- Vintage "Wing Nut Style"
- Vintage "Basket Nut Style"
- High Temp "Flex Nut Style"
- Standard MS & NAS#'s
- Mini Rivet Pattern Style
- With Replaceable Nut Style
- Capped & Self Sealing Styles
- Surplus Boeing BACN10- #'s

Give Lance Aircraft a call at 972-247-3701, or E-mail lanceaircraft@yahoo.com or check out <http://www.nutplates.com/> the next time you are hunting for nut plates.



A Sample of Vintage Nut Plates

CLICK BOND NUT PLATES

At AirVenture this year, CLICK BOND was passing out samples of their Mechanical/Adhesive Fastening Systems. They are basically nut plates and standoffs that are glued in place with a super adhesive.

Advantages of the Click Bond products include eliminating the need of additional holes with nut plates, because you are bonding rather than riveting. With cable tie mounts, standoffs, studs and posts, no holes are necessary for installation.

Click Bond Products supply more than 3,000 items, including nut plates, dome nut plates, cable tie mounts, grommets, bushings, studs, standoffs, Click patches, etc., available in various sizes, materials and levels of specification. Some are also available with metric threads.

To learn more about the products offered by Click Bond and to order, you can go to www.theflightshop.com, or e-mail sales@theflightshop.com, call 435-723-3469 or fax 435-723-1736. All fasteners, including adhesives, are sold individually except when ordered in a kit. No minimum order required and they accept extended purchase orders. The Flightshop has been around for decades and is a well known Piper Aerostar maintenance facility in Brigham City Utah.

TRACK ROTOR UNVEILED

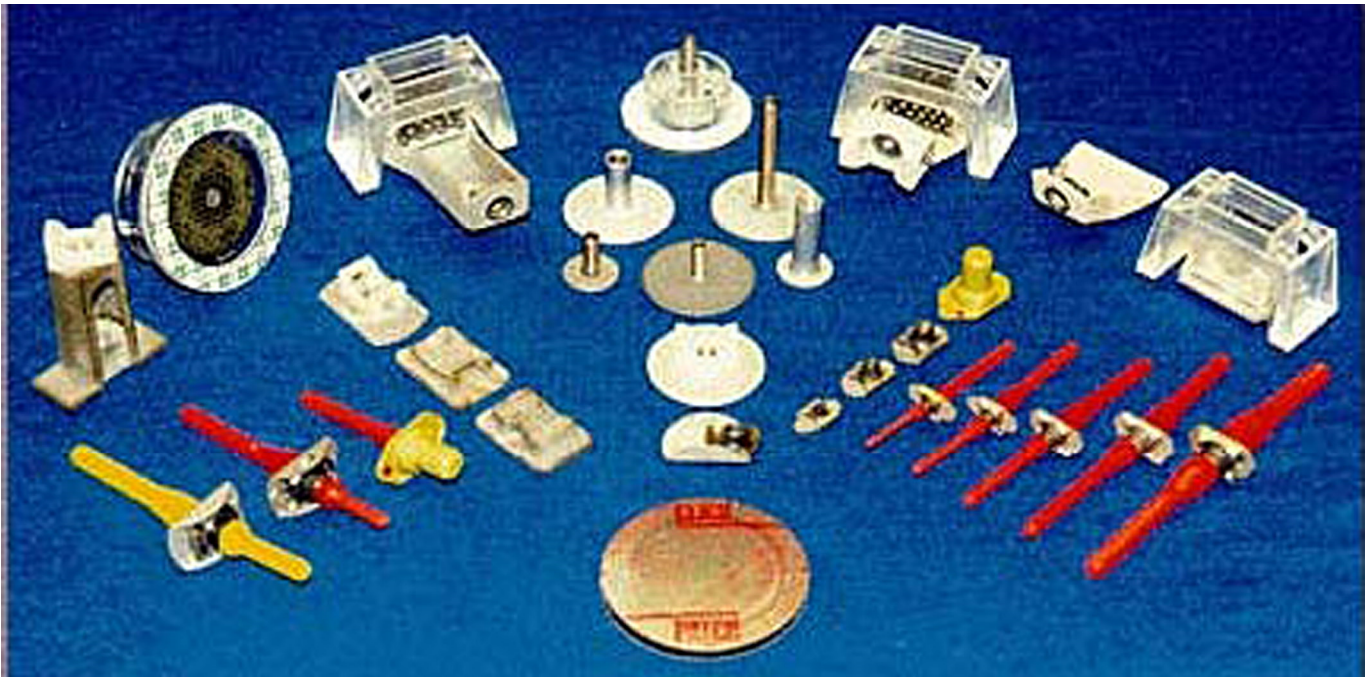
German aircraft engineers are working on the development of a track rotor aircraft. If you can imagine a tank track with little airfoils on it that as the track rotates the airfoils generate lift.

From their website: (<http://d-dalus.com/>), D-Dalus is a completely new aerial vehicle (it is neither a helicopter nor a fixed wing aircraft). It was shown publicly for the first time at the Paris Air Show in 2011. D-Dalus combines the advantages of helicopters with those of fixed wing aircraft. It remains stable in the air, rotates up to 360 degrees about all three axes and has the ability to land on moving platforms, such as boats in rough seas, thanks to three dimensional synchronization and 'glue-down' by reversed thrust. D-Dalus in forward flight requires 30% to 60% less power compared to helicopters because its vertical thrust is created by its high lift and low drag winged body design.

Continued on page 3

A prototype of D-Dalus was unveiled earlier this month. Just the small version, not the one that could hold people. It seems like a really interesting concept for propulsion and lift. The rotors have adjustable airfoils on

them that can direct the force of air in just about any direction. While its efficiency remains to be seen, it does have a lot of unique features and a lot of capability that most aircraft don't have.



A Sampling of Click Bond Products and Nut Plates



Concept Model of D-DALUS Track Rotor Aircraft



Front Quarter View of the D-DALUS Track Rotor Air Craft

1,000TH RV-12 OFF THE LINE

On August 27, 2015 the shipping department at Van's Aircraft Inc. had several orders to fill. By the end of the day, they'd rolled the 937th RV-12 kit empennage package onto the shipping dock, where it was picked up by a customer from Washington State, Richard Bangsund.

What's the significance of "937"? Well, combined with the S-LSA "fly-away" RV-12s that the company has constructed, the number of RV-12 empennage kits produced and sold now totals 1,000. This is the sixth RV design to exceed 1,000 sales, while four designs have exceeded 1,000 completions. The number of flying RVs listed on the company's website now totals 9,178. Of those 407 are RV-12s.

"All of us at Van's have known that the RV-12 is an excellent little airplane," said company founder Dick "Van" Van Grunsven. "It's nice to see the word spreading in the market place." It's certainly spread in his immediate family! Van and two of his brothers have built

and fly RV-12s. So have a pair of company employees.

RV-12s have also been completed by several groups of young people participating in the Teenflight and Eagle's Nest programs. S-LSA RV-12s are now operated by several flight schools, who report that their students love the way it flies, and often request the RV-12 even when other airplanes are available.

B-29 DOC ALMOST DONE

The World War II B-29 Superfortress, named "*Doc*", is entering the final stages of its restoration and, if all goes well, it will become the world's second operational B-29 Superfortress by the end of 2015.

Doc's Friends, the nonprofit volunteer organization restoring *Doc*, are waiting to receive an airworthiness certificate from the FAA and have already completed an application to perform flight testing out of McConnell Air Force Base in Wichita, Kansas.

Once operational, Doc's Friends said the organization plans to run the aircraft as a

Continued on page 5

flying museum to accomplish its intended mission.

So far, the restoration has included turbocharger casings installed on all four of the aircraft's engines, the fuel system is in the process of being fine-tuned, and final avionics

components are ready to be installed. In addition, the FAA has already begun its review of the Aircraft Inspection Plan.

Learn more at the [Doc's Friends website](http://www.b-29doc.com).
www.b-29doc.com



Bill Unternaehers Skybolt Lower Wings Fresh Out of the Paint Shop



**Bill's Upper Skybolt Wing
He is Using the Stewart Systems Process for Recovering Them**



Award Winning Folding Wing Biplane at AirVenture



Photo by Jordan Ross

**Denny Myrick's RV-12
Now One of 1000 Sold!**



**It is rumored that this is your Newsletter
Editor taking off in His J-3 Cub
Unfortunately it isn't, my J-3 is down for
an annual inspection**

EAA Chapter 1217 Personnel

President	Curtis Clark	602 710-4494	EAAChapter1217@aol.com
Vice President	Terry Emig	520 836-7447	terry@valleypumpandmachine.com
Secretary/Treasurer	Jack Pollack	480-695-4441	Jack.Pollack@Analyticalgroup.com
Newsletter Editor	Ron Kassik	480 948-0168	ronkassik@cox.net
Young Eagles	YOUR NAME - HERE POSITION OPEN		
Technical Counselor	Dan Muxlow	480 563-4228	N27DM@cox.net

ThunderAds

FOR SALE, ETC.

2010 VAN'S RV-12 ELSA

155Hrs. T.T. A&E, Garman SL-40, GTX-327, 496 GPS, Dynon D-180 w/AP-74 Auto Pilot, A&P Built, Professional Paint, Located DVT \$85,000., Contact Paul for photo's via e-mail pmshep@live.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 O-290-D2 \$3,000 or \$16,000 for both. Bill Refrow 602-843-9862 w7lov@cox.net

ZENITH STOL CH 710

Estate sale. Aircraft close to finishing. Located in Yuma, AZ. Contact Bob Carter for more information BobC@buildersguild.com

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 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

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

PROJECTS FOR SALE

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

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.

SERVICES

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

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

HOME BUILT 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

In case you have your aircraft hangered at Deer Valley Airport, you should be aware of some up coming maintenance that will affect access to your hanger. The DVT management has published the information presented below:



City of Phoenix
PHOENIX DEER VALLEY AIRPORT

Coming Soon!!! North Ramp Reconstruction Project

September 4, 2015

Dear Valued Deer Valley Airport Tenant,

Please be advised of an important airport improvement project. The asphalt on the north ramp at Phoenix Deer Valley Airport is in need of complete replacement. The project will commence this Fall.

- **Should you wish to fly your aircraft during the timeframe that your hangar is affected, you will need to relocate your aircraft prior to construction** as your hangar will be unusable for a period of time during construction.
- The City of Phoenix will waive your hangar rent for the period of time that your hangar is unusable.
- Covered tie-downs will be provided to you at no cost for the period of time that your hangar is unusable. Please contact Kim Siebert to arrange your covered tie-down. She can be reached at: kimberly.siebert@phoenix.gov or 602.273.2133 or 602.273.2159.
- During the phase of construction that your hangar is affected, your hangar will be inaccessible. *Exceptions may be considered with prior approval if you need access to your hangar for a very short period of time, i.e. to pick up a tool or other necessity.
- Shared storage containers will be provided at no cost to you for aviation items such as tugs, oil, tools, equipment, etc. Since the storage containers will be shared by multiple tenants, use them at your own risk. The City of Phoenix will not be responsible for theft, vandalism, or damage to your property. The containers will be locked & keys will be provided to those tenants who are using them.
- A very small number of hangars **MIGHT** be available for aircraft that are susceptible to weather, i.e. open cockpit, fabric-covered, etc. Please contact airport administration for more details.
- Open Houses will be conducted in the Deer Valley Airport terminal lobby to provide you with important details & allow you the opportunity to ask questions. Open Houses will be held on the following dates:
 - Sept. 24, 2015 6:00pm
 - Sept. 30, 2015 6:00pm
 - Additional Open Houses will be held in the future as the project progresses.
- **See reverse side of this page for phasing details.**
- A website has been established to provide you with construction updates. For more information, please go to: www.improvingdvt.com

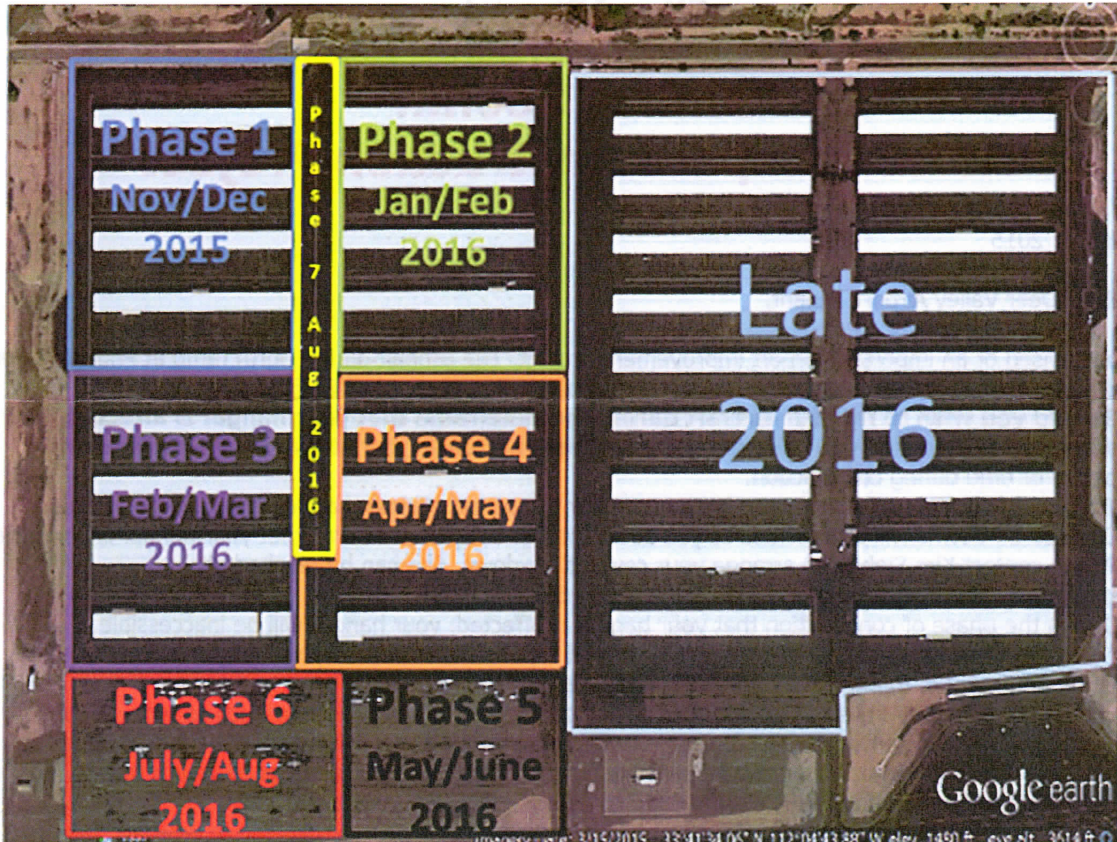
Thank you for your patience while we complete this important project.

Sincerely,

Ed Faron
Deer Valley Airport Manager

702 West Deer Valley Road • Phoenix, Arizona 85027 • 623-869-0975 • FAX: 623-780-0990

Recycled Paper



- Hangar Rows 23-27 Nov./Dec. 2015
- Hangar Rows 32-36 Jan./Feb. 2016
- Hangar Rows 28-31 Feb./Mar. 2016
- Hangar Rows 37-40 Apr./May 2016
- Open Tie-Downs 1046-1075 May/June 2016
- Open Tie-Downs 1000-1045 July/Aug 2016