



The ThunderWord

Thunderbird Field EAA Chapter 1217 March 2018

Scottsdale, Arizona

PRESIDENT'S CORNER*

Greetings from my corner of the hangar! At last month's meeting we heard from Hector Holguin from KTVK Channel 3 TV. Hector gave us some insight into the amazing world of drones and what it takes to navigate the spider web of rules and regulations governing operating them. He brought along several drones and flew them. I was amazed that the drones used for the TV station were so small and the cameras as high quality for their size.

When March rolls around it means it's time for the annual Cactus Fly-In. This year Bernie Gross persuaded Stu Bloemer (Legend Cub), Jack Pollack (Chipmunk) and myself (RV-8) to get up early on Friday and bring our planes down for the school kids to look at. As each group of 20-30 kids came by we gave a little talk and answered questions. There were probably ten busloads of kids that got to learn about our planes and why we fly them.

The actual Fly-In portion was a complete blast catching up with old friends and making a few new ones. Some of the restorations are beyond belief. My personal favorite was a 40 hp Taylor J-2 Cub. It looked like a giant model airplane it flew so slow. It didn't have an altimeter but rather a Zenith Height Gauge.

It is really a treat when Chapter members come to me with a great meeting idea. That's what happened this month, John Washington had met our speaker several months ago and worked with him to fit speaking with our Chapter into his busy travel schedule. Thanks John and I personally invite everyone to come to this month's meeting,

.See you at the March meeting!

Curtis

MARCH CHAPTER MEETING

The March meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, March 15th, beginning at 7 pm. This month's guest speaker is Michael Lavelle, aviation author and former Director of the Seattle Museum of Flight. He will be giving a presentation titled: "Above the Pacific - The Summer of 1927". Dole Air Race to Hawaii. Getting this high quality presentation is thanks to the hard work of Chapter 1217 member John Washington.

Guests are always welcome!

MEETING LOCATION

The location is Paradise Valley Community Center, 17402 North 40th Street. It is on the west side of 40th Street just north of Paradise Valley High School. Basically 1/4 mile north of Bell on 40th Street. We will meet in the large multi-purpose room. We learned last month you can park on the south side of the building and have more parking options that are closer to the door. Look for the signs!

Guests are always welcome!

FUTURE CHAPTER PROGRAMS

Thanks to some great contacts and ideas from Chapter 1217 members, we actually have commitments from speakers to talk at some of our future meetings.

April meeting: Mark Larsen "The Development of the Boeing 787 Dreamliner"

May meeting: Ernie Copeland FAA Scottsdale FSDO "Basic Med for Pilots"

AIRCRAFT COMPANY

BACK IN BUISNESS

The MX series of aerobatic aircraft are the cutting edge in performance and maneuverability. A few years back the

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company shut the doors due to limited demand for their products. The good news is Mitch Velickovich has announced they are back with both the production and factory built

models. Their factory is located in Tybee Island, Georgia, USA Telephone: 704-607-6609



Beautiful Jungman owned by Pete Cafferelli from Tucson

CACTUS FLY-IN WINNERS

GRAND CHAMPION	Stinson SR-8	John Nance, San Diego, California
PRE WAR MILITARY	PT-22	Danny Don Chandler, Arizona
POST WAR MILITARY	DHC Chipmunk	Jack Pollack Scottsdale, Arizona
PRE WAR GENERAL AVIATION	Boeing PT-17	Carol Cooke Eagles Roost, Arizona
		Carol also received the National Award and Texas AAA Chapter awards
POST-WAR GENERAL AVIATION	Cessna 182	James Kavanaugh, Chandler, Arizona
PEOPLES CHOISE	North American AT-6	Lee & Carolyn Jones Aguila, Arizona

**NEW AIRCRAFT COMPANY
VASHON AIRCRAFT INDUSTRIES**

Vashon Aircraft is the newest aircraft manufacturer in the aviation center of Seattle, Washington, where they design and build the US-made Ranger R7 aircraft. Vashon Aircraft was founded by John Torode, and the Ranger R7 was designed by noted Pacific Northwest

aeronautical engineer Ken Krueger a former engineer at Vans Aircraft.

Affordable, American, Rugged, Refined and Equipped. With the Ranger R7, pilots can choose all of the above: the compromises end now. The Ranger is a two-seat aircraft perfect for "\$39 burgers" (\$100 burgers are way too expensive), meeting up with other



Vashon Aircraft Ranger R7 aircraft.

pilots at fly-ins, and Saturday morning breakfasts. Starting at only \$99,500, every Ranger features a Continental O-200-D engine, a complete Dynon SkyView avionics suite including autopilot, and more. The Ranger R7 is an affordable combination of great airplane flight characteristics, unsurpassed visibility, roominess, and fun for both local sightseeing flights and cross-countries to Oshkosh.

John Torode, founder and CEO of Vashon Aircraft, says "I started Dynon to bring affordable, advanced technology to the aviation community, yet there still remains a need to innovate beyond the panel to bring affordable flight to more people. With Vashon Aircraft, I hope to empower the next generation of pilots with the tools they need to take to the skies."

The Vashon Ranger R7 is the first aircraft designed to fill the gap between aging, under-equipped certificated aircraft and newer but expensive Light Sport Aircraft. The Ranger is an American two-place airplane that features rugged full metal construction, a spacious cabin, and starts at \$99,500, Always Fully Equipped.

The base Ranger model - the Yellowstone - is priced at \$99,500 and includes standard features that are unheard of for an airplane under \$100,000. Equipment includes a complete Dynon SkyView equipped panel, including Autopilot, with features such as primary flight instruments, engine monitoring, 2020-compliant ADS-B Out, Mode S transponder, navigation and mapping, ADS-B traffic and weather, COM radio, two-place stereo intercom, angle of attack, Wi-Fi, and so much more. The Ranger's electrical system is managed by the Advanced Control Module, featuring EFIS-controlled electronic circuit breakers, from Dynon's Advanced Flight Systems division. Other standard equipment

Continued on page 4 includes electric flaps and trim, full-size 600-6 tires, and LED position and taxi/landing lights.

The Ranger R7 is designed, engineered, tested, and manufactured at the Vashon Aircraft factory headquarters near Seattle, Washington, and is assembled at its Paine Field assembly and delivery center (just down the taxiway from the Boeing wide body plant.) The avionics are made by Dynon Avionics in Woodinville, Washington, and the engine by Continental in Mobile, Alabama. The Ranger R7 is one of the first examples of a small aircraft that utilizes pre-painted metal to save

manufacturing cost, time, and weight. Utilizing this advanced technique, Vashon eliminates the need to paint the aircraft after assembly.

Vashon also manufactures the vast majority of its own parts, reducing its supply chain drastically, further reducing the cost of the airplane as well as build time.

Adjustable rudder pedals accommodate pilots of all sizes. The Ranger's 46" wide cabin is designed for two real people, and is even more spacious than most 4-place certified aircraft.

Both seats fold forward 90 degrees for your weekend camping adventure. The Ranger's strut-less, cantilevered high wing design and expansive windscreen offer stunning views. Safer by Design

The Ranger incorporates multiple active and passive safety features, including a low stall speed, benign slow flight characteristics, and well-harmonized controls. Every aircraft is equipped with a two-axis autopilot with level button that features built-in airframe protections. Other safety features include angle of attack with progressive audible cues, and dual 5-point safety restraints.

The trusted Continental O-200-D provides over 70 years of world-tested reliability. Its lightweight design doesn't sacrifice performance, durability, or service life.

The Ranger R7 is already an approved S-LSA, and multiple conforming aircraft are already flying. The official launch and public unveiling will be at AirVenture Oshkosh 2018.

FMI: www.vashonaircraft.com



Jack Pollack's Chipmunk Best Post War Military Winner at Cactus Fly-In

WHY YOU NEED AN AVIATION SPECIFIC CHARGER-MAINTAINER

By Bill Woods, VP of VDC Electronics

Problem:

If you have been neglecting your battery, not flying as much or just tired of replacing it every 2-3 years, listen up. A good quality aviation specific battery (12-V or 24-V) should give you 5+ years of safe, near full capacity

performance, if it is properly maintained. If you think occasionally charging your battery with an automotive or "trickle" charger is all you need to do to keep it healthy, think again. Yes, even a sealed dry "maintenance free" aviation battery needs to be kept at full charge, at all times, to avoid something called "sulfate". What is sulfate? It is the #1 cause of early battery failures, far greater than even

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Chapter member Hayden Newhouse caught these old enemy's sharing a few stories at The Cactus Fly In

vibration, high-low temperatures or contamination. It's caused by failing to keep a battery fully charged, such as when your flight times are short, i.e. typically less than three hours.

What's the Difference?

An aviation-specific battery is different than auto or marine types. To maximize the cranking amps and reserve capacity, while trying to minimize weight and size, aviation battery manufacturers use a higher specific gravity (SG) electrolyte in their aviation batteries. This "hotter mix" (more H₂SO₄ [sulfuric acid], less H₂O [water]) means it will be overcharged whenever a non-aviation charger is used. Why? Automotive chargers are set at a higher output voltage (typically 13.8 -14.6 volts) than aviation batteries can handle. In addition, they are typically not "at-the-battery" temperature compensated which means the problem becomes even worse as the temperature rises. This results in overcharge, especially in temperatures above 25°C (77°F). In a maintenance type battery (filler caps), the need to add water beyond small amounts every 3-6 months, indicates the battery is being overcharged. Sealed "dry" maintenance-free batteries also lose electrolyte through their venting valve in the form of a vapor-gas. Unlike maintenance types, there is no way to replace it and the battery is on its way to dying, long before it

should. Undercharging in cold weather also results when using any type charger that does not compensate for the cold by increasing its output voltage when temperatures drop below 60°F (15.5°C).

What is the Result?

When sulfated, a battery can never be fully charged no matter how long it is left connected to a charger.

The Solution:

Keep the battery fully charged at all times you are not flying the plane. If the battery is already sulfated, an aviation specific charger with a de-sulfating mode that uses high frequency (not high voltage) will dissolve it, returning the battery to a healthier condition. A full charge, from the right charger, can then be accomplished. How do you know when your battery is sulfated? Simply put a digital voltmeter across the terminals, after the battery has been charged and left "rested" for at least 12 hours. If the voltage is less than 12.9 (25.8 for a 24-V) the battery is sulfated. It can be reversed (dissolved) with the right charger-desulfator, providing the readings are not less than 12.5 volts (or 25 volts for a 24-V battery).

Only "at-the battery" temperature sensing charger-maintainers, set to the voltage levels recommended by the aviation battery manufacturer, should be used other than for

"jump starts." If other types are used, battery life will be shortened by years with lower cranking amps and reserve capacity. The money you may save, by using a non-aviation specific charger-maintainer, will be more than offset by more frequent battery replacements and a less safe battery, due to diminished capacity.

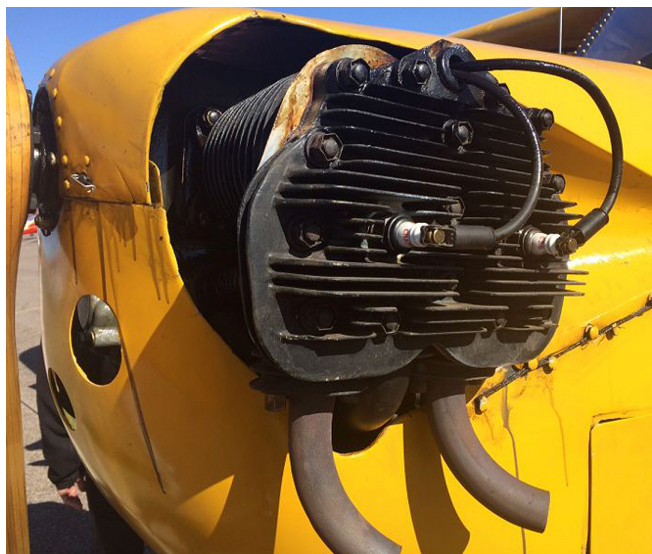
Conclusion:

If you are not getting 5 or more years of 85% or greater capacity from your battery, then you are already paying for the right aviation specific charger-maintainer you could be using to avoid sulfate and extending life and performance. Given the price of batteries vs. the cost of a good aviation specific charger-maintainer-desulfator, is easy to justify.

Chapter member Molly Hedges tries on the RV-8. I think she wants one Gary!



Zenith Height Gauge Altimeter in J-2 Cub



Taylor J-2 Cub with A-40 engine owned by Lee Macon from Chandler

ThunderAds

FOR SALE, ETC.

COOL PLANES FOR SALE

Only flown by little old ladies to church on Sundays. <http://captainbillywalker.com/aircraft-for-sale/aircraft-for-sale>

BAKENG DUECE

On gear, most of structural fabrication complete, wings, ailerons, flaps, tailfeathers and fuselage 90 percent done. No engine but dynafocal ring for a 0-320, new cleveland wheels and brakes. Located in hangar at Prescott \$3500, Charlie 602-377-2271 cdmichael1@gmail.com

Mooney for Sale

Terry Emig has a friend in New Mexico who is selling his Mooney. For more info, call Terry at: 520-836-7447 or email terry@valleypumpandmachine.com

Piper Cub Wings

Rebuilt with new spars. One wing ready for cover the other wing soon. Pat Battle A&P/IA DVT 602-274-2434

Completed RV-7A tail kit.

Completed and zinc chromated. Nate D'Anna 602 891-4771 Email Natedanna@q.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 birdganqft@gmail.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, kit for \$3,000 or \$16,000 for both. Bill Refrow 602-843-9862 w7lov@cox.net

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

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

SERVICES, ETC.

High-Perf Tailwheel & Akro Instruction

Pitts, Skybolts, all experimental tailwheel aircraft. 46 years experience. Scottsdale Airport Budd Davison, Plus-5 Aviation, 602-738-2045, www.airbum.com, buddairbum@cox.net

OIL COOLER REPAIR AND SALES

Chapter member owned. R & E Cooler Service 800-657-0977 www.oilcoolersvs.com

ANNUALS

Owner Assisted. Jim Moss had to move to Alaska to care for sick parents. He may be back later.

FLIGHT INSTRUCTION, ETC.

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

HOMEBUILT AIRCRAFT CERTIFICATION

ABDAR Gary Towner 928-535-3600

ANNUALS, RESTORATIONS, FABRIC WORK

Eloy Airport Julie White 520-466-3442

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Send an E-mail to:
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