EAA CHAPTER 93

Established 1962



Madison, Wisconsin

November 2017





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View from an **Open Cockpit**

Roger Stuckey, President

November is an important month for our chapter as we elect chapter officers



and board members for the coming year. Your board of directors appointed a nominating committee in August to solicit candidates for 2018 and the nominees are in this newsletter for your review. Our chapter by-laws state that the election will take place at the November membership meeting, and that chapter members can self-nominate for an officer or board member position at the November meeting prior to the vote. This is your chance to get involved in a key leadership role in your chapter. If you want to serve as an officer or board member in 2018, be sure to attend the November meeting and self-nominate for the position you want.

This month we are also revealing our redesigned Corben Chapter 93 Logo. In October we released a survey with four logo choices for the membership. Two-thirds of you responded, which is a fantastic response rate for any survey, and you clearly have a logo preference! The Banquet Committee also launched a chapter banquet survey in October to get your feedback on our current banguet format and to look for ways to improve our 2018 banquet. Thank you all for taking part in these surveys.

We have used surveys as a membership-input tool several times this year with great success in getting your thoughts and desires on the various topics that concern our chapter. Given your willingness to take part in chapter surveys, we will continue to use, but not abuse, this tool as topics arise where we need the collective input of the membership.

And finally, Tim Cornett graciously agreed to allow us to use his beautiful hangar at Middleton Airport for our November chapter meeting. Tim's hangar is located on the runway end of Echo Lane and we can park in the grass area between his hangar apron and the taxiway. Please be respectful of Tim's hangar and its contents; we want to leave his hangar as clean as or cleaner than when we arrived. Pete Aarsvold is our guest speaker this month and you will want to bring a chair of some sort if you wish to sit while listening to Pete.

Our new chapter name tags will be available for you at the November meeting and I strongly suggest that you return your name tag at the end of the meeting for use in December. 🛹

Chapter President

Roger Stuckey rogergstuckey@gmail.com

Chapter Vice President Rob Tweed rbtweed@charter.net

······ Chapter 93 Officers ······

Chapter Treasurer Jim Lins jwlins@facstaff.wisc.edu

Chapter Secretary Keith Doyon keith@keithdoyon.com

Newsletter Staff

Al Kurth, Editor Keith Doyon, Reporter and Backup Editor Sandy Hufton, Designer

Please send contributions to: alanekurth@gmail.com

······ Upcoming Chapter Events ······

November Chapter 93 Meeting Wed., November 15, 2017 6:00 - 9:00 pm **Tim Cornett's hangar at Middleton Airport**

Rusty Pilot's Seminar

Sat., December 16, 2017 9:00 am - 12:00 pm

Middleton Airport Conference Room

November Chapter 93 Meeting

Middleton Municipal Airport / 3309 Echo Lane Wednesday, November 15, 2017 6:30 pm

Our next chapter meeting is **Wednesday, Novem-ber 15.** Plan to arrive at 6:00 pm and spend some time socializing with chapter members. The membership meeting starts at 6:30 pm. The meeting will be held at **Tim Cornett's hangar at Morey Field** (C29).

Hangar address is 3309 Echo Lane, the first row of hangars west of the airport ramp and the furthest hangar north in the row, adjacent to the fuel farm. Entry will be at the hangar service doorway on Echo Lane. Parking is available in front of the hangar and in the grass area next to the fuel farm.

Our speaker for our meeting will be **Pete Aarsvold,** CFI and Chapter 93 member. A First Vice President at Bankers' Bank in Madison during the day, Pete enjoys teaching people how to fly on nights and weekends as a part-time instructor with Morey Airplane Company at Morey Field.

Pete's topic will be **"Flight Training Tips – Instruc**tor's Perspective." Pete will be sharing many hints, tips, and interesting stories gleaned from his interactions with student pilots, private pilots, and pilots transitioning to tail wheel aircraft.

Pete holds a BS degree in Business Administration from Winona State University and received further

education relating to commercial banking from the National Commercial Lend-

ing Graduate School. Pete obtained his private pilot certificate while in college in 1980. He has been flying for fun ever since, having logged 3,500 hours, including 2,350 hours as a flight instructor.

Pete has been teaching at the Morey Airplane Company since 2006. In addition to commercial, instrument and CFI ratings, he holds a commercial glider rating with aero and ground tow endorsements.

Pete loves teaching tail wheel transition to pilots. Two of Pete's clients had their first flights in their own tail wheel aircraft and went on to earn their private pilot and sport pilot certificates without ever having logged pilot in-command time in a tricycle gear aircraft. Pete is familiar with sport pilot licensing requirements and can often be found flight training in client-owned light-sport aircraft.

For more information about Pete Aarsvold, visit his *LinkedIn* site. For more information about Morey Airplane Company flight instruction, visit their website: https://www.moreyairport.com/about-instructors

EAA Corben Chapter 93 S&RP Committee Hosting Rusty Pilot's Seminar on December 16

The Student & Rusty Pilot's Committee of EAA Chapter 93 (Middleton) is proud to host an AOPA **Rusty Pilots Seminar!** The seminar is set for Saturday, December 16, 2017 from 9:00am-12:00pm at Morey Aviation in Middleton, Wisconsin.

If it's been a while since you last sat in the left seat of a general aviation aircraft, a Rusty Pilot's Seminar helps you understand what's changed in aviation since you last took the controls, and gets you brushed up on your aviation knowledge. The Rusty Pilots program is developed by AOPA in partnership with local flight training providers in order to create the best environment for getting you back in the air and a part of the general aviation community.

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Rusty Pilots Seminar (continued)

LOCATION: Middleton Municipal Airport - Morey Field (C29) Morey Aviation FBO Building 8300 Airport Road, Middleton, WI 53562

Presenter: The Rusty Pilots Seminar presenter will be AOPA Ambassador and Regional Rep Andy Miller. Andy is highly experienced and a great resource should you have any questions leading up to the presentation as well as being available after the presentation to help with the process of getting attendees to complete their flight review and return to active flying.

Immediate Benefits: Biennial Flight Reviews require ground instruction as part of the review. In addition to learning getting up-to-speed on newer developments and likely learning a lot in the process, attendees automatically receive two to three hours of ground instruction which counts toward a Flight Review and usually lowers the expense of a Flight Review.

Cost: Free to AOPA members - (AOPA membership is \$69/year regular; \$49 intro for Student Pilots), \$69

for non-AOPA members (Membership often lowers insurance rates, among other good benefits. If you are not an AOPA member but want to attend the seminar, you should seriously check out membership. You can sign up for membership at the seminar!)

Registration: AOPA has this Seminar posted to the events calendar on its AOPA website:

https://hangar.aopa.org/events/item/52/844

AOPA also has a custom pre-registration link up and running specifically for this Chapter 93 Rusty Pilot's Seminar:

https://ww2.eventrebels.com/er/Registration/ StepRegInfo.jsp?ActivityID=23640&StepNumber=1

Unfortunately, seating will be very limited as our space at Morey Aviation is limited, so pre-registration, which is usually strongly suggested, will in all likelihood be required for this seminar. If you are seriously interested, then seriously sign up.

Chapter Contact:

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November Chapter Election Candidates

Roger Stuckey

During our September Board / Business meeting we created a Nominating Committee to seek officer and board candidates to serve in 2018. The list below reflects the Nominating Committee's recruitment effort, but this is not the final list of candidates for our November Chapter Election. Per our By-Laws, any member in good standing can self-nominate for an elected position prior to our chapter vote. If you are interested in serving in a leadership position during 2018, please make your self-nomination to Roger Stuckey, President, or Keith Doyon, Secretary, at the beginning of our November Chapter Meeting.

I will distribute election ballots at the beginning of the meeting and members present at the November meeting will elect our 2018 Chapter Leadership Team prior to our guest speaker for the evening.

2018 Officer and Board Member Nominations:

President: Vice-President: Secretary: Treasurer: Roger Stuckey Rob Tweed Keith Doyon Jim Lins

Board Member (vote for 3):

Scott Compton Shane Baker Robert Gake Dustin Sheridan Frank Smidler

New EAA Corben Chapter 93 Logo

by Roger Stuckey

Corben Chapter 93 has a new logo that preserves our long chapter heritage and provides us with a means to easily resize the logo to fit many forms from baseball caps to flags. In October we sent you all a survey with four logo designs for you to make a first and second choice. I am happy, and proud, to say that you all took an active role in considering the logos and making the final selection a clear, concise choice. We also need to thank Shane Baker for sourcing and working with our graphic designer to quickly produce four excellent logo choices, and for the many "tweaks" we made to these designs.

The survey results are as follows:



TECH

CORNER

Repair Tip: **Stuck Valve Field Repair**

by Skot Weidemann

Over the years I have heard many stories about stuck valves, mostly on Continental engines. In my ownership of a handful of aircraft with Continental engines I have been lucky enough to not have experienced stuck valves until recently.

I fly a classic 1948 Luscombe 8A fitted with a fairly recently overhauled C90-8 with only 400 hours since major overhaul by a very reputable engine overhaul shop. This engine has been working well since overhaul, although I have noticed a little "stumbling" occasionally. I suspected spark plugs, ignition or a carb mixture issue, but never suspected a sticking valve. I have been running it with respect, doing regular oil changes, adding TCP lead scavenger, and using a Tanis electric preheater for winter startups.



In spite of all that, an exhaust valve on the left front cylinder presented itself to me stuck wide open one morning a couple weeks ago. Since the engine has no electric system, I need to chock the wheels and turn the prop by hand (or find anyone nearby who volunteers... and knows how to do it). Part of the procedure for starting (first, with the magneto switch off) is to turn the prop a half-dozen revolutions to pull oil up into the cylinders, bring some fuel into the intakes and provide a crude compression test in the process. That morning, I noticed three out of four cylinders had good compression, but the fourth one had no compression at all. At last annual we had noticed the #4 cylinder had somewhat lower compression than the others, so that is the one I suspected right away. On removing the spark plug on that jug and shining a flashlight inside, I could clearly see the exhaust valve open and not moving during turning of the prop.

I called on my friendly mechanic, Tom Cunningham from T.C.'s Air Care at the Baraboo Dells Airport. When he had time to make a visit he brought his bag of tricks to unstick the valve without removing the cylinder. I had taken the cowl off, removed the baffles, and took off the cylinder head cover.

The procedure in a nutshell is:

- Remove spark plug
- Move piston to bottom of the stroke (to allow the largest volume of displacement)
- Fill the cylinder cavity with nylon rope through the spark plug hole
- Turn the prop to move the piston towards the top of the cylinder and consequently compress the pile of rope inside, pushing the offending valve closed
- Tap out the valve rocker shaft, remove shaft and rocker
- While valve is in the closed position, a special valve spring compression tool is used to compress the springs, followed by removing the two tapered keys to free up the valve springs
- Remove the valve springs
- Move piston to bottom of cylinder & remove rope

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Stuck Valve Field Repair (continued)

- Tap valve (via stem) into cylinder chamber
- Clean out the valve guide with the right sized hand reamer
- With a special "grabber," reach in through the spark plug hole, grab the valve stem and reinsert into valve guide
- Push rope back into enlarged cylinder chamber & compress valve again
- Compress springs, insert key keepers for springs, re-install rocker & rocker shaft
- Re-assemble the rest, including head cover, baffles, cowl, etc.

Start up and go fly

Tom says he has done at least a hundred of these procedures without taking a cylinder off.

Chapter 93 Member Ethan Brodsky Places in EAA's Founder's Innovation Prize Contest!

by Keith Doyon

Loss of control (LOC) in flight is the leading cause of fatal accidents in general aviation, particularly in amateur-built aircraft. Fatal LOC events include base-to-final stalls, departure stalls, loss of control while maneuvering, spatial disorientation, and more. The EAA Founder's Innovation Prize is a contest to solve the problem of fatal loss of control accidents in amateur-built aircraft through innovation.

The 2017 contest sought ways to solve this problem. Noted experts from throughout the aviation world judged the second year of the prize, a competition that challenged EAA members to submit their best solutions to in-flight LOC. Acceptable solutions could be technical in nature or otherwise. The contest is intentionally open-ended, with the only stated goal to reduce fatalities from this type of accident in amateur-built aircraft dramatically over the next decade — 25% in the next five years, 50% in the next ten. In the final results, announced at Air-Venture 2017, EAA



Corben Chapter 93's own **Ethan Brodsky** placed 4th overall in the 2017 contest with his "Buzz Ball" haptic (touch) feedback system tied in to the aircraft's turn coordinator ball position. Essentially, Ethan's device is a pilot aid that senses the ball position and generates a vibration (a buzz) in the pilot's seat, on the left or right side, directing the pilot as to which rudder pedal should be applied to coordinate the turn and keep the ball centered at all times.

Ethan notes that aircraft instruments are almost all visual in nature and that our visual senses are already busy when flying. The Buzz Ball provides its feedback tactilely, through feel, and is both simple and not likely to be confused with other feedback. The pilot will be able to recognize and correct uncoordinated flight.