
Pittsburgh-Butler Region Experimental Aircraft Association - Chapter 857

EAA 857 NEWSLETTER



From a few years ago at Sentimental Journey

Reminiscence!

Presidents Message

EAA 857 Members,

The Covid-19 virus situation continues to alter our chapter meeting plans. When I asked for member preferences regarding how to conduct this months meeting we received a response from about 1/3 of our members; there was little appetite for meeting in the Airport Board Room. The alternatives were to meet somewhere outdoors or conduct an online meeting or outright cancel the meeting. These were all equal in opinions offered from respondents. Therefore I plan to try an online ZOOM meeting for the June 16 chapter meeting. We are now in the Pennsylvania Green Phase of response to the virus pandemic; please continue to follow the recommended CDC guidelines for remaining safe and healthy at this time.



In addition to modifying our June meeting to be presented as a trial online ZOOM offering, we had previously *cancelled* the June 13th, International Young Eagles Day at KBTP. This was due to the limitations while we were in the yellow phase on large group gatherings in excess of 25 people as well as uncertainty as to availability of our volunteer pilots and ground personnel. Now that we are in green phase in Pennsylvania, we will evaluate at the Board of Directors level regarding our scheduled August and September events.

Please everyone take care of yourselves and your families!

Ted Merklin,
President, EAA Chapter 857

Minutes of May 19, 2020 Meeting

The scheduled monthly meeting for May 2020 was cancelled due to the Covid-19 Pandemic situation in Pennsylvania. There was no group activity constituting a quorum of members for which meeting minutes were taken.

Exhausts from the June 2004 Zelig Zephyr Newsletter



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The Zelig Zephyr



Inspection and Care of Aircraft Exhaust Systems

Review of accident/incident reports reveal that there have been numerous fatalities and injuries to pilots and passengers as a result of powerplant exhaust system failures.

FAA's studies show that approximately 50 percent of exhaust system failures occurred in the exhaust gas-to-air heat exchanger, resulting in carbon monoxide gas entering the cabin through the aircraft heater. The presence of exhaust gases in the cabin may affect the general efficiency of the pilot by causing impaired mental alertness, judgment, and reasoning, all of which contribute to or cause this type of accident/incident.

Approximately 20 percent of exhaust system failures occurred in the exhaust stack pipes, manifolds, and tail pipes, introducing carbon monoxide gas, smoke or fire into the cabin area.

Approximately 20 percent of engine partial power loss and power failures resulted from internal muffler failure. Sheet metal baffles and/or diffusers usually break off inside the muffler completely or partially block the escape of exhaust gases from the engine cylinders. The severity of the power loss is proportional to the extent of blockage.

Exhaust systems deteriorate for the following reasons, engine operating temperatures, vibration which causes metal fatigue, engine backfiring and unburned fuel in the muffler. A primary reason for most exhaust system failures is inadequate and infrequent inspections and the lack of routine and preventive maintenance between required inspections. The owner/operator of an aircraft is primarily responsible and in the interest of safety should perform preflight inspection of the following external components of the exhaust system:

1. Muffler and heat exchanger for general condition and leaks.
2. Leaking exhaust stack gaskets.
3. Loose or broken clamp connections.
4. Cracked or broken stacks and tail pipes.
5. Cracks adjacent to welded areas and stack bends
6. Thinning of joint areas due to vibration wear.
7. Metal pitting due to internal erosion by combustion products.
8. Proper installation and alignment of exhaust stacks, ball joints and or connections.

In addition to the above, the firewall seals, should be carefully inspected to assure the exhaust gases will not enter the cabin.

Exhaust leaks and cracks are indicated by a gray-white or sooty-back streak or discoloration. When defects are suspected, a qualified person should inspect them. A thorough inspection of the entire exhaust system should be conducted in accordance with the manufacturer's recommendation at the annual inspection.

Chuck Potts, Technical Counselor

Amusing Tools from the February 2006 Zelig Zephyr

Tool Description

Submitted by *Chuck Potts*

DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, splattering it against that freshly painted airplane part you are drying.

WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench with the seed of light. Also removes fingerprint whirls and hard-earned guitar calluses in about the time it takes you to say, "Ouch..."

ELECTRIC HAND DRILL: Normally used for spinning pop rivets in their holes until you die of old age.

PLIERS: Used to round off bolt heads.

HACKSAW: One of a family of cutting tools built on the Ouija board principle. It transforms human energy into a crooked, unpredictable motion, and the more your attempt to influence it's course, the more dismal your future becomes.

WISE-GRIPS: Used to round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

OXYACETYLENE TORCH: Used almost entirely for lighting various flammable objects in your shop on fire. Also handy for igniting the grease inside the wheel hub you want the bearing race out of.

WHITWORTH SOCKETS: Once used for working on older British cars and motorcycles, they are now used mainly for impersonating that 9/16 or 1/2 socket you've been searching for the last 15 minutes.

HYDRAULIC FLOOR JACK: Used for lowering an automobile to the ground after you have installed your new disk brake pads, trapping the jack handle firmly under the bumper.

EIGHT-FOOT LONG DOUGLAS FIR 2X4: Used for levering an automobile upward off a hydraulic jack handle.

TWEEZERS: A tool for removing wood splinters.

PHONE: Tool for calling your neighbor to see if he has another hydraulic floor jack.

SNAP-ON GASKET SCRAPER: Theoretically useful as a sandwich tool for spreading mayonnaise; used mainly for getting dog shit off your boot.

E-Z OUT BOLT AND STUD EXTRACTOR: A tool ten times harder than any known drill bit that snaps off in bolt holes you couldn't use anyway.

TWO-TON ENGINE HOIST: A tool for testing the tensile strength on everything you forgot to disconnect.

CRAFTSMAN 1/2 X 16-INCH SCREWDRIVER: A large pry-bar that inexplicably has an accurately machined screwdriver tip on the end opposite the handle.

AVIATION METAL SNIPS: See hacksaw.

TROUBLE LIGHT: The home mechanic's own tanning booth. Sometimes called a drop light, it is a good source of vitamin D, "the sunshine vitamin", which is not otherwise found under cars at night. Health benefits aside, it's main purpose is to consume 40-watt light bulbs at about the same rate that 105-mm howitzer shells might be used during, say, the first few hours of the Battle of the Bulge. More often dark than light, it's name is somewhat misleading.

PHILLIPS SCREWDRIVER: Normally used to stab the lids of old-style paper-and-tin oil cans and splash oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.

AIR COMPRESSOR: A machine that takes energy produced in a coal-burning power plant 200 miles away and transforms it into compressed air that travels by hose to a Chicago Pneumatic impact wrench that grips rusty bolts last over tightened 58 years ago by someone at ERCO, and neatly rounds off their heads.

PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a part.

HOSE CUTTER: A tool used to cut hoses too short.

HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts not far from the object we are trying to hit.

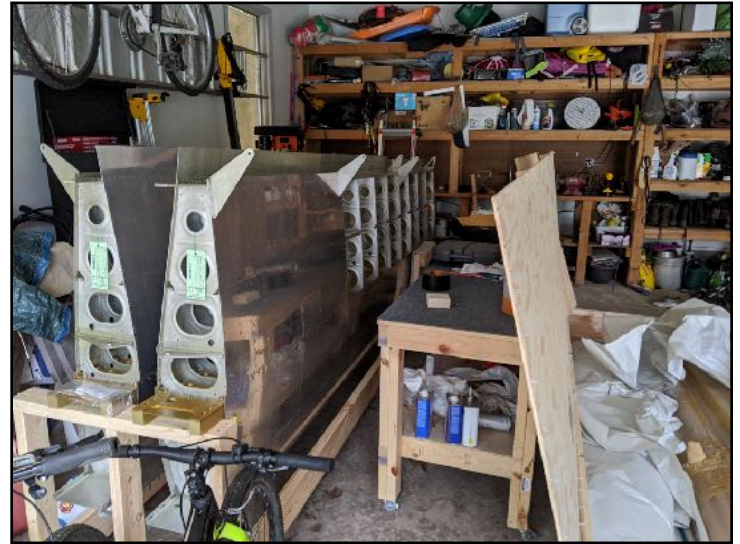
MECHANIC'S KNIFE: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on contents such as seats, vinyl records, liquids in plastic bottles, collector magazines, refund checks, and rubber or plastic parts.

EXPLETIVE: A balm, usually applied verbally in hindsight, which somehow eases those pains and indignities following our every deficiency in foresight.

Chris Farrar's Vans RV-10 Project

One of our newer members, a colleague of Frank Szczerba is Chris Farrar. Chris has been working on a Vans RV-10 for some time now. He describes his project status below:

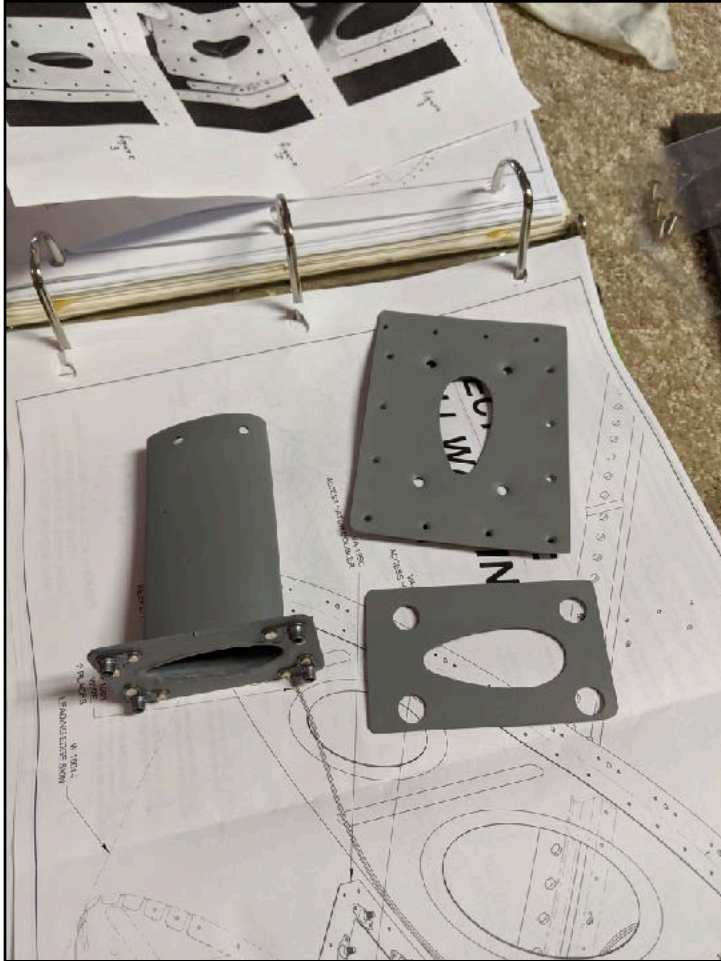
“I am working on an RV-10 Quick Build. The side view is of the two quick build wings right after they arrived. They are almost finished now.”



“Pictured at left are the completed empennage and tail cone for the project.”

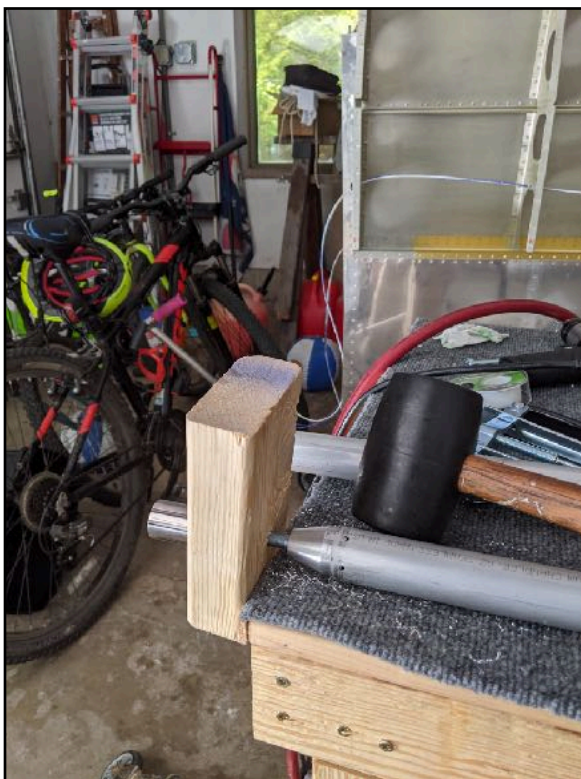
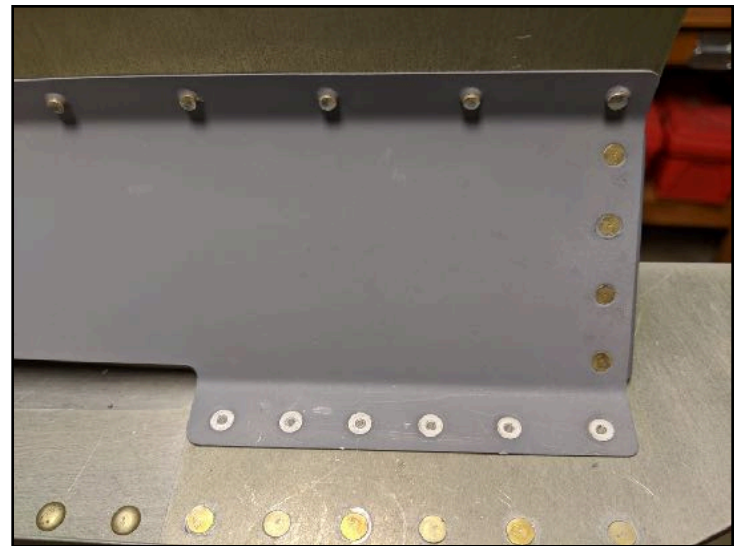
“This is the stall warning switch assembly right before I installed it.”



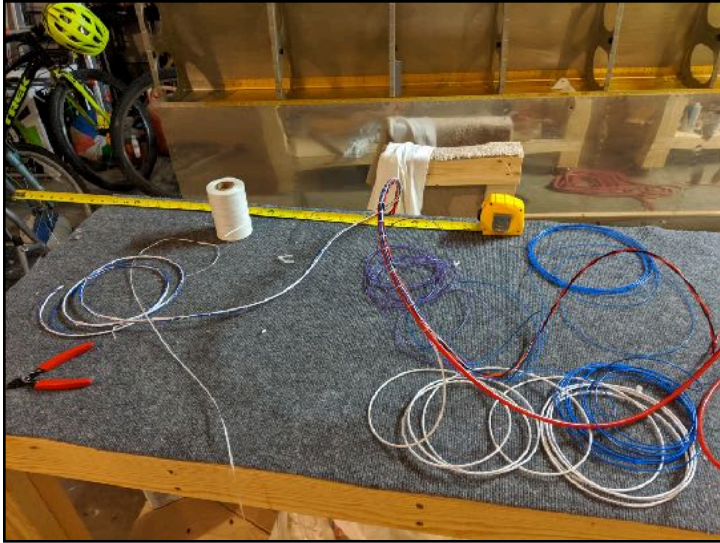


“These are parts of the Pitot mount assembly right after I primed them. This is a Gretz Pitot mount for a Garmin Pitot.”

“This is a picture of the end of a fairing on the trailing edge of the wings. It shows Cherrymax rivets at the bottom and Flush rivets at the top and side.”

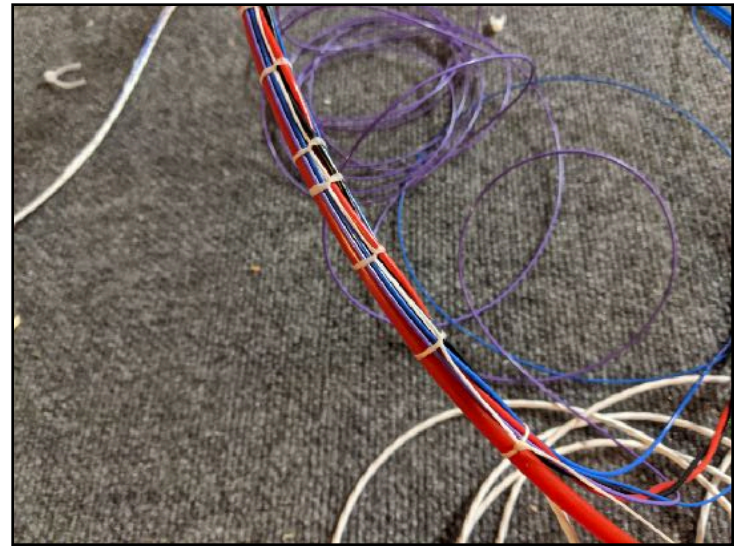


“This is a setup that I used to remove the torque rod end cap. This was just before I primed all the parts prior to doing the final assembly and riveting.”



“This is a picture while I was lacing the wiring harness for one of the wings.”

“This is a close up of my wire lacing. It shows the AoA tube and wingtip lighting wiring



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The project is looking great, Chris! Perhaps yours is a candidate for the EAA Builders Log documentation site that I presented in last months newsletter. Yours would be the first for EAA 857!

Chris also asks of our members:

“Can anyone in our EAA chapter recommend a local facility where I can paint the parts of my airplane as I finish them? I could set something up in my garage but I don't have the room. I don't think I can paint in a hanger because most airports don't allow that.”

So, if anyone has advice to offer to Chris regarding paint facilities, please let us know!



EAA 857 - Chapter Meetings and Events for 2020

Meetings are held on the third Tuesday of the month at 7:00 PM
in the Conference Room at the Pittsburgh-Butler Regional Airport.

Chapter Meetings	Tuesdays	January 21	
		February 18	
		March 17	[CANCELLED]
		April 21	[CANCELLED]
		May 19	[CANCELLED]
		June 16	ZOOM Meeting
		July 21	
		August 18	
		September 15	
		October 20	
		November 17	
	EAA 857 Chili Cook Off -	Sunday,	February 9
International Young Eagles Day -	Saturday,	June 13	[CANCELLED]
EAA 857 Fly-In and YE -	Sunday,	August 9	
EAA 857 Fly-In and YE -	Saturday,	September 13	

2020 National Events

Sun 'n Fun -	May 5 - 10	[CANCELLED]
Sentimental Journey -	June 16 - 20	[CANCELLED]
AirVenture Oshkosh 2020 -	July 20 - 26	[CANCELLED]

EAA 857 Chapter Officers for 2020

Use contact@eaa857.org to email the Chapter President.
Your request will be forwarded to the appropriate individual.

President	Ted Merklin
Vice President	Phil Kriley
Treasurer	Frank Szczerba
Secretary	Rick Schubert
Newsletter / Web Page	Ted Merklin, Ed.
Young Eagles	Phil Kriley
Technical Advisors	Chuck Potts Bob Santolla
Board Members	Dan Hood 2020-2022 Bob Santolla 2020-2021 Gary Marsico 2020