
Pittsburgh-Butler Region Experimental Aircraft Association - Chapter 857

EAA 857 NEWSLETTER



Dave Hanna's Aeronca basking in the sun at KBTP during a Chapter 857 Fly-In and Young Eagles day in 2018.

We are sure looking forward to great events and sunny days such as this for our 2020 season!

Presidents Message

EAA 857 Members,

As you can see at the right, your EAA Chapter 857 has earned the privilege to display the logo for the EAA's Gold Rank as a chapter organization. This was achieved for the program year 2019 having met 9 of the 10 criteria for chapter excellence. Chapters receive one point for meeting each of the following criteria:

- Attended a chapter leadership training session
- Growing or steady membership
- Offers IMC or VMC Club programs
- Participates in Young Eagles or Flying Start programs
- Has an EAA-approved Flight Advisor or Technical Counselor
- Participates in EAA's Annual Chapter Member survey
- Reads EAA ChapterGram regularly
- Requested EAA promotional materials or ChapterBlast email
- Hosts at least two public events each year
- Owns/leases a facility

We only lacked a point for the Leadership Training. I inquired about the 10th criteria because we do not technically own or lease space, I was told by the Chapters Office that since KBTP grants us 24/7 access to the space we occupy, then that counts toward that credit. We have received a vinyl banner to display, and the logo will also appear on our new website currently in development.

We held the post Super Bowl Chili Cook off on Sunday February 9 at 1 pm. My thanks to all who attended with 5 great pots of chili, cookies, pumpkin cake and good company. We will do it again next year!

Please remember that chapter dues, \$25 per person, were due and payable on January 1, 2020. You must be a National EAA member to maintain your chapter membership. We renewed our charter in December with the national organization, and your dues in part pay for that charter and our yearly insurance.

Remember, our next meeting is Tuesday 2/18/2020 at the normal time, 7pm, **however we will meet initially at the HighFlight Academy to observe their Red Bird Flight Simulator.**

See you there!

Ted Merklin,
President EAA 857





Minutes of January 21, 2020 Meeting

Opening: President Ted Merklin called the meeting to order at 19:00 and led the members in saying the Pledge of Allegiance.

Attendance: Eleven members were in attendance.

Secretary's Report: Everyone was asked to be sure that they had signed the sign-in sheet. A motion to accept the Secretary's report of the November 19, 2019 Minutes published in the newsletter was made by Mike Neuman and Todd Springer seconded. The motion was accepted.

Treasurer's Report: The bank accounts were reviewed by the Treasurer. A motion to accept the Treasurer's report was made by Larry Schaefer and Dale Soergel seconded. The motion was accepted.

Newsletter: Articles are always welcome from anyone. Thanks to all who contributed this month. Notify Ted Merklin if you are not receiving the newsletter.

Website: The newsletter is also published to the chapter web site at: <http://www.857.eaachapter.org/home.htm>. Be advised that a new website is in development and the above site will be shut down by EAA on 3/31/2020.

Young Eagles Report:

- We have a candidate for the Air Academy in 2020 and a position is held for him via payment of the \$200 deposit.
- We have received several email requests for YE information; response has referenced our 6/13 event upcoming.

Technical Advisors: Chuck Potts and Bob Santolla, EAA 857 Advisors

- *Report:* Reminder- ADSB is required as of January 1st; pertinent to aircraft with engine driven electrical systems.

Old Business:

- *Chapter Storage Room:* Improvements for storage and material movement are planned. On hold pending establishment of sales tax exemption certificate as a 501C3 entity.
- *Review of 2020 Calendar:*
 - February 9 Chili Cook-Off, at 1pm: please bring your best hot, spicy Chili.
 - June 13 International Young Eagle day
 - August 9 Fly in breakfast with YE
 - September 13 Fly in breakfast with YE

New Business:

- *Member Dues:* Your 2020 dues (\$25) are due now as of 1/1/2020. You must also maintain EAA National membership. Please forward to the Treasurer, Frank Szczerba.
- Will inquire with HighFlight Academy regarding observation of their flight simulator at the February meeting.
- 2019 Chapter awards distributed for those present at the January Meeting.

Adjournment: A motion to adjourn at 19:55 was made by Frank Szczerba, and seconded by Dave Hanna.

Program: The program was by Phil Kriley regarding his Cozy Mark IV recovery from a landing incident including resulting repairs and updates to the aircraft.

Respectfully submitted: Theodore Merklin, President

Visual Inspections

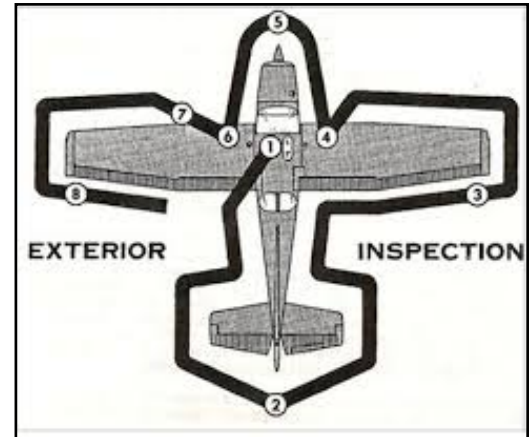
By Bob Santolla

Did you know that nearly all inspections performed on general aviation aircraft are visual. This includes you homebuilders and your latest creation.

Visual inspections are fast economical means of assessing the condition of an aircraft and its components. It's the way your mechanic performs your annual or 100 hour inspection and the way the homebuilder, with repairmen authorization, will perform his conditional inspection.

The visual inspection can be broken down into four broad categories that relate to their difficulty and degree of effectiveness so let's take a closer look.

1. **Walk around inspections** are performed usually by the pilot before every flight. The overall purpose of the visual inspection is to determine if detectable inconsistencies exist that might affect the performance of the aircraft, low or flat tires, propeller nicks, engine oil and fuel cap checks etc.
2. **General visual inspections** can be made of interior or exterior portion of the aircraft to detect damage, failure, or irregularities. This is the point that inspection plates, access panels and hatches are opened. While considered a visual inspection, it is necessary to physically touch as many parts and components as possible during the visual inspection. Look at chafing, loose, or missing fasteners, corrosion, cracks, and proper routing of cables and conduits. Chipped paint or smoked rivets may indicate movement that should not occur.
3. **Detailed visual inspections** is an intensive visual examination of a specific area, system, or assembly to detect damage, failure, or irregularity. A detailed visual inspection may be called for in order to comply with an airworthiness directive AD. A review of service bulletins, AD's, aircraft history, and accident reports are all appropriate when undertaking a detailed visual inspection.
4. **Special detailed visual inspections** is an intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. It is likely that specialized techniques and equipment will be required and intricate disassembly and cleaning may be required. Dye penetrants, borescopes and image enhancement and recording devices will be needed.



So to perform a visual inspection, what tools and conditions do we need? Adequate quality and intensity of lighting is critical to good visual inspections. Parts and components being inspected must be free of dirt, contamination, or anything that would tend to obscure detection of important defects. Flashlights, hand mirrors, clean shop rags, borescopes, magnifying glass are just a few of the tools.

The most important item is your eyes, hands, and knowledge. With that, you can inspect your aircraft with confidence. Do not hesitate to get your mechanic involved if you have doubts. Your Chapter Tech Counselors are a great resource too. Keep building and flying!



From The Archive

EAA 857 Members:

The article you will find at the right and on the following pages is reproduced from the Zelenople EAA Chapter 857 Newsletter of May 2001, Volume 1, Number 4. This was several months after our Charter as EAA 857 was executed in November 2000.

It is not certain who to attribute this article to. It may have been from a fellow by the name of Daryl Stutes who is acknowledged earlier in the newsletter as the new Editor.

I would like to periodically include some of our archived content from 20 years of EAA Chapter 857 in future newsletters. I hope you find this worthwhile!

The Editor.

ESCAPING CLOUD ENCOUNTERS - IFR SKILLS FOR VFR PILOTS

Remember the uncomfortable feeling you had under the hood when you were a student pilot? You climbed or descended when you meant to stay level. The aircraft seemed to turn on its own when you wanted to maintain a heading. Sometimes you thought the airplane was turning, but it really wasn't. Fortunately, the instructor would usually end the session in 10 or 15 minutes, and any discomfort disappeared quickly. But it wasn't really scary. You had the advantage of knowing that an instructor was there and that the weather wasn't really bad. Then one day, years later when your instrument skills are only a pleasant memory, the forecast for VFR weather goes wrong and you're in the soup. Now, consider tuning the radios, talking to air traffic controllers, reading a chart, and determining VOR radials, while keeping the airplane under control. The instructor won't be there, and your instrument skills will be taxed well beyond any remaining from student pilot training. You need not only to be good on instruments, but to be so good that there is brain power left over for navigation and communication. Hopefully, you will recognize weather problems early and will make a decent, if not perfect, 180-degree turn before having to prove that your skills are still sharp. Statistics tell a different story, however. Attempting to continue VFR flight in deteriorating weather, especially at night, remains a

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Zelienople EAA Chapter 857

leading cause of accidents. Here are some tips for countering the problem.

The panic factor

What is the worst thing about all that instrument practice you had as a student? You knew that it was only practice and that it was in a low-threat environment. Your emergency, should you decide to fly in poor VFR conditions, will occur in a high-threat environment. "Pilots find it difficult to compel themselves to act in an actual emergency," says one aviation author. That is why he presents students with one or two simulated emergencies while they are practicing under the hood. The technique is based on a concept known as state-dependent learning and refers to the emotional state of the student. Train them in a high-pressure environment and students will be more likely to take action than to freeze and waste valuable minutes when the emergency is real.

Dangerous situations

It isn't just bad weather that can require instrument skills. Lift off at night from an isolated airport over an expanse of forest and essentially you are flying on instruments. What about daylight flight visibilities reported as 5 miles in haze? The horizon will be gone, but you will still have ground references below. Difficult and unpleasant, but not impossible. Now, conduct that VFR flight over an expanse of water 5 or more miles wide, and what happens? The water and sky blend into one sheet of gray, and essentially you will need IFR skills to be comfortable, even in broad daylight. What if we throw in another risk factor -- night -- and drop the visibility to 3 miles? In that case, you will be lucky to find your home airport even when overhead. The experience should make you a believer in refresher instrument training.

Common mistake

Flight on instruments for the non-instrument pilot is primarily an emergency maneuver. The main purpose is to make a 180-degree turn

to get back to VFR weather. A common mistake is to begin a standard-rate, level turn, and forget what the new heading was going to be, Machado said. The solution is to look at the number on the bottom of the heading indicator before starting the turn and memorize it or write it down.

Likely reaction

We all imagine ourselves doing the right thing. We read safety articles about VFR flight into IFR weather and say, "If I had been there, I would have turned around." But your actual reaction is likely to be refusal to believe that the weather is too poor to continue. And on you'll fly -- probably without going on instruments. One newly minted private pilot's experience during a scud run is typical. During periods of a few seconds when visibility was reduced to IFR levels, his piercing gaze never left the scene outside the windscreen, as though his laser eyes could burn away the fog. What he needed to do, even during those few seconds, was to admit that the situation had deteriorated and go on instruments immediately. The long slide into IFR weather is very subtle and gradual.

What to do

Get an instrument rating. That is your best opportunity for handling the aircraft safely in instrument conditions. Failing that, you need a method that will work years from now when that weather emergency finally occurs. One instructor teaches students to label their flight instruments by placing sticky notes beneath them. "Start" goes below the attitude indicator. Other instruments are labeled as follows: altimeter, "level"; airspeed indicator, "climb/descent"; turn coordinator, "turn"; heading indicator, "straight"; vertical speed indicator, "rate." Then he tells the student to, "Make a level turn." The student's eyes go to "start" to establish the turn attitude. Step two is to go to the altimeter labeled "level" to assure that the aircraft is not climbing or descending. Finally, look at the turn coordinator labeled "turn"

and adjust the bank angle until a standard rate turn is indicated. As long as the student remembers the reciprocal heading, a level 180-degree turn can be easily made to accomplish the primary goal of getting out of bad weather. By labeling instruments, the instructor eliminates the need to remember which are primary and which are secondary.

Worst fear

Losing control. It is any pilot's worst fear when flying on instruments. During training, the instructor taught you two unusual attitudes primarily. One is a steeply banked descending turn with airspeed increasing rapidly, while the other is a steeply banked, extremely nose-high attitude with airspeed decreasing rapidly. In either case, the answer is to return to straight-and-level flight. The question is, how do you get there? For the nose-low spiral attitude, the procedure is: (1) reduce power; (2) level the wings; and (3) raise the nose, as it says in the FAA's Flight Training Handbook. Obviously, pulling the nose up briskly with the wings steeply banked describes the method for entering an accelerated stall. If the airspeed is decreasing rapidly and altitude is increasing, use the attitude indicator to bring the nose back to the horizon. Simultaneously level the wings and increase power to prevent a stall. The key goal is to prevent a stall that, if aggravated by improper rudder usage, can lead to a spin. Reading about the proper recovery procedures will do little good, however, since you may forget them in the panic of a real loss of control. Save money by practicing normal instrument flying at home with a computer-based flight simulator to reduce chances of ever entering a spin -- or combine unusual-attitude training with any checkout in a new rental aircraft or other proficiency ride, such as a flight review.

If all else fails

What if nothing seems to work? You've made the 180-degree turn and the weather still seems bad. Have

patience. What if the weather behind, in front, and on all sides is bad? Now what? Call someone — anyone. If you don't feel up to reading frequencies off a chart while flying the airplane, call on emergency frequency 121.5 MHz and try to mention a point along the route or your approximate location so that the closest station can respond. Otherwise, every station that hears you will answer. Your objective should be to contact a facility with radar service and ask for vectors to airports reporting VFR weather. Air traffic control facilities monitoring 121.5 will be able to provide those frequencies. Flight service can do the same thing, and will have weather reports indicating which airports in your area are VFR. When flying in a remote area, you may be able to contact a flight service station over the VOR station used for navigation. Frequencies will be listed on the chart.

Refresher training

The biggest obstacle to keeping current is your memory of the last time you flew on instruments. Chances are, you remember doing well. That memory lingers on, but all the while those instrument skills are ebbing away. Why should you practice something that you think you do well? Besides, practice is expensive, and not fun. The AOPA Air Safety Foundation suggests a solution: practice with Microsoft Flight Simulator or a similar computer-based simulator program. Or purchase one of the more expensive IFR trainer computer programs -- it will be fun (a yoke and rudder pedals will add realism). While such training lacks the pressure created by an actual emergency, it at least makes you think about the proper procedures and provides valuable practice in scanning the instruments.



Chapter 857 Members

See your chapter's Website at:

<http://eaa857.org>

Take a look today!

Newly Updated with **This Newsletter!**

Prior Issues for 2019 will appear in our newsletter archive.

Please submit your project updates, photos, articles, thoughts, technical tips

to contact@eaa857.org

ALSO, Monitor our Facebook Group Page:

Search for "EAA Chapter 857"

Websites of Interest to EAA 857 Members

<http://www.butlercountyairport.org>

<http://www.eaa.org/>

<http://www.airventure.org/>

<http://www.aopa.org/>

<http://www.faa.gov/>

<http://faasafety.gov>

<http://www.condoraero.com>

www.draggintailpilots.weebly.com

Be Advised: A new website is currently in development. Ultimately the URL required to access the site will be the same as above with a new look and a new provider for the site. This should be effective in April.



EAA 857 Chapter Officers for 2020

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

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

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 April 21 May 19 June 16 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
EAA 857 Fly-In and YE -	Sunday,	August 9
EAA 857 Fly-In and YE -	Saturday,	September 13

2020 National Events

Sun 'n Fun -	March 31 - April 5
Sentimental Journey -	June 16 - 20
AirVenture Oshkosh 2020 -	July 20 - 26