THE WINDSOCK

FEBRUARY 2022

Editor: Frank Huber | Layout Editor: Deb Huber

The President's Flight Deck

After a virtual January Chapter meeting, we are planning to meet in person for the February Chapter meeting. We will be following our normal schedule of dinner at 6:00 PM, business meeting at 7:00 pm, and guest speaker at 8:00 PM. Our guest this month is Jerry Vecoli of EAA Chapter 25. Jerry will present on his history of obtaining a sport pilot CFI rating. Jerry spoke at one of our Chapter meetings a few years ago, but has new information that will be interesting to hear.

We will be returning to our pancake breakfast starting March 5th, after an absence of a couple of months. Be sure to promote that to friends and family.

Many thanks to Chapter members who have renewed their memberships! Keeping your membership up-to-date helps us determine how much fund raising we need to secure to meet our financial commitments for the year. As mentioned previously, membership dues do not cover our fixed expenses, we must fund-raise throughout the year. With that said, there are about 40 members that have not renewed for 2022. On March 31st, those members will be moved to inactive status.

Congratulations to Michael Grzincich and Mike Miller of our Young Eagles program for having another record year of flying Young Eagles. Chapter 237 has been awarded for the second year in a row for flying the most Young Eagles! This award will be presented to us at the 2022 GMAG event. Thank you to all the pilots and volunteers who have helped with this program this year!

It appears there will be plenty of volunteer opportunities for our members this year as the D.A.D. event is scheduled for June 4th and 5th. We will provide updates as that event unfolds but put it on your calendar as that is a fund raiser for us as well.

Until next month, be sure to invite a friend or neighbor to join us at a Chapter meeting or Chapter breakfast to introduce them to the wonderful world of general aviation. *Kevin*

CHAPTER 237 BLAINE, MN EAA

YOUR CHAPTER BOARD OFFICIERS

Kevin Sislo, President
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Contact the Board at: board@eaa237.org

EAA CHAPTERS GOLD 2019

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You Need To See At Least One Of These 10 Things To Land From An Instrument Approach *by Corey Komarec*

10 Tips For Flying With An Autopilot In IMC

6 Tips For Flying A Great Visual Approach

EAA IMC CLUB

EAA VMC CLUB

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Why Aircraft Weight Affects Climb Performance *by Swayne Martin*

Quiz: 6 Questions To See How Much You Know About Stalls *by Corey Komarec*

10 Skills VFR Pilots Can Learn From IFR Pilots

This Wintertime Illusion Can Cause Accidents On A VFR Day

5 Of The Most Common Crosswind Landing Mistakes

How Low Can You Go? Your Guide To Minimum VFR Altitudes

Quick Links

AIR FACTS
the journal for personal air travel—by pilots, for pilots

Tips from the Ancient Pelicans *by James Walters*

The old man in the plane *by Emma Hutchinson*

Aviation's roaring '20s? A case for GA growth *by John Zimmerman*

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6 Design Improvements That Reduce Aircraft Drag

tfp

Student Pilot Crashing Airplane on First Solo

PURSUE MASTERY OF FLIGHT

FLYING LESSONS uses recent mishap reports to consider what might have contributed to accidents, so you can make better decisions if you face similar circumstances. In almost all cases, design characteristics of a specific airplane have little direct bearing on the possible causes of aircraft accidents—but knowing how your airplane's systems respond can make the difference in your success as the scenario unfolds. Apply these FLYING LESSONS to the specific airplane you fly. Verify all technical information before applying it to your aircraft or operation, with manufacturers' data and recommendations taking precedence. You are pilot in command, and are ultimately responsible for the decisions you make.

This week's LESSONS | Mixed Messages

For many years, the rate of general aviation accidents has generally trended down. Both the total number of non-commercial accidents and the rate at which these accidents occur for each estimated 100,000 flying hours have improved slowly, but fairly steadily, over the past decade.

Recently, a rapid release of multiple years' accident data, frequent updates caused perhaps by COVID delays to data review, gives us mixed messages. AOPA Air Safety Institute's 2019 Nall Report evaluation of National Transportation Safety Board (NTSB) data, released in October 2021, states the rate of both total and fatal accidents has gone up. "The overall total and fatal accident rates for 2019 saw an upward trend," according to AOPA.

Less than a month later, an NTSB press release reported that accidents rates were down in 2020, even when taking into account the reduced flying in The (First) Year of COVID. NTSB's 2020 synopsis includes, "Most aviation deaths in 2020 took place during general aviation operations, where 332 were killed, compared to 414 the year before. The 2020 fatal accident rate in general aviation was 1.049 accidents per 100,000 flight hours, compared to 2019's rate of 1.064."

The following month, December 2021, AOPA posted a panel-discussion video that touted 2021 as the safest year in aviation ever—something for us to feel very good about.

Yet, only a month after that, that is to say last week, AOPA and the National Business Aviation Association (NBAA) issued a joint press release in which NBAA President Ed Bolen and AOPA President Mark Baker warn of: …an appreciable uptick in general aviation accidents since late last year and [they] are encouraging pilots to slow down and go back to the fundamentals of professionalism.

Speaking during an NBAA webinar…AOPA president and CEO Mark Baker called the recent uptick "a bit frustrating and concerning" particularly since "we came through last year with the safest general aviation record in all time, and we all know the activity was up significantly."

While proud of the result, the accident and fatality trajectory this year is much greater, he said, adding that what makes this trend frustrating is that they are involving experienced crews that are still making mistakes. "This is a time for people to pause and say, 'What have we done here to make sure that we're launching safely and we're not taking risks…and following the procedures and checklists?'" he said. "It's a very concerning year and we don't like to be on news at 11 as the lead story. And, unfortunately, we've had a number of those here recently."

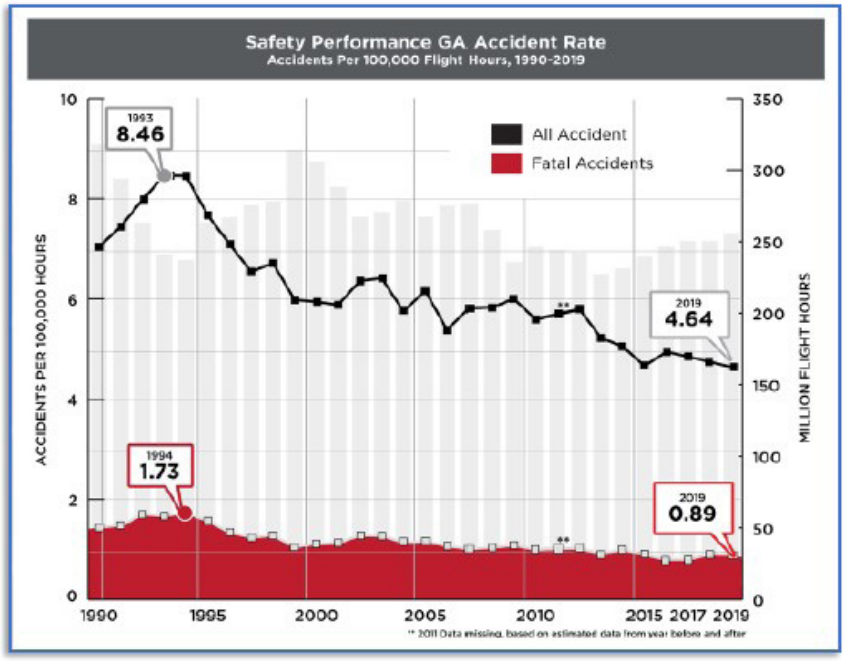
NBAA president and CEO Ed Bolen agreed. "Being safe and being perceived to be safe are essential for our industry to grow. And the accidents that we're looking at in the last part of last year are very troubling because of [they involved] trained pilots operating sophisticated equipment in places they're familiar with in situations where applying the professional discipline that we are accustomed to and that we promote doesn't seem to have been reflected."

While investigations are still underway for these accidents, Bolen said, "We're not seeing that these are mechanical challenges. We're seeing these areerrors in judgment, errors in practices, and those are things that are within our control."

We're getting mixed messages. In October we're told things are getting worse. In November they say things are better; in December we're safer that we've ever been. But, in January we're cautioned that things are getting worse. So what are we supposed to believe?

The issue is that although the accident rate (events per 100,000 hours flown) fluctuates up and down, the total numbers are small enough that it only takes a small increase or decrease to show as a large percentage of increase. A small fluctuation one way or the other in the number of crashes changes a few numbers up or down in the hundredths place in the accident rates that form the basis of these reports. We revel when the number goes slightly down; we reel when the number goes slightly up.

For more than a decade the number and rate of serious and fatal general aviation accidents has remained low, but frustratingly steady. That's the bigger number to worry about.



SOURCE: AOPA AIR SAFETY INSTITUTE/NATIONAL TRANSPORTATION SAFETY BOARD

Legendary aviation author Richard L. Collins' last book, published shortly after his death in 2018, put it masterfully in its title: The Next Hour: The Most Important Hour in your Logbook. Trending up or trending down, the overall safety record of general aviation operations doesn't really matter if you fly as if your best flight ever is the one you're preparing for or making now. What's important is how safely you command your aircraft each time you fly.

I'm currently reviewing and documenting my notes and margin comments on Collins' book, similar to those I posted about the classic Stick and Rudder. When complete I'll post these notes on my website like those notes I made on Langweishe's most famous work.

We all know how we're supposed to fly an airplane:

- *Remain current and proficient,* and if either lapse, get some instruction and practice to return to a high state of proficiency.
- *Plan your flight thoroughly, then fly your plan*—while being flexible if the plan must change.
- Know what performance to expect, *compare actual performance to your expectations, and, if there's a discrepancy, check it out* before beginning or continuing a flight.
- *Use standard operating procedures or, if conditions require you to deviate from your SOPs, do so carefully* after considering how the different technique will affect your safety of flight.
- *Use checklists* to confirm you've followed your procedures correctly.
- *Adhere to all limitations,* including those *on the aircraft and yourself* as a result of proficiency, currency, medical condition, fatigue and stress.
- *Stay well within the boundaries* of the weather, the regulations and good sense.

Do these things and your accident risk will be as low as it can possibly be.

Comments? Questions? Relevant experiences? Let us learn from you at mastery.flight.training@cox.net.

The Flight of a Lifetime

I got to fly the P-51 Mustang on Thursday, February 10 with Jerry "Jive" Kerby at Stallion 51 at Kissimmee, Florida. Jive is a retired 23 year Air Force fighter pilot, having flown the F-4 and F-15 during his entire career. After retiring, he helped create Draken International, the largest provider of tactical fighter aircraft services to the US military, is an airshow pilot in his RV-7, T-28 and L-39 jet and races his L-39 at the Reno Air Races. I knew I was in good hands for my flight when I heard that bio.

I have been desiring a flight in a Mustang since I first saw one at Oshkosh in 1971. So my wife, Deb, agreed it would be a great 70th birthday present. The weather on my birthday in January was IFR, so we pushed it back to February 10. It was an awesome experience and Jive was a great instructor, showing me some of the capabilities of the Mustang. The aircraft we flew, Crazy Horse, is a Cavalier TF-51 that is a converted two seat trainer with full controls and instruments in the back seat. So instead of just going for a ride, I got to fly the Mustang. Stallion 51 has two identical Crazy Horse TF-51s.

During the flight we did everything from stalls to aerobatics and I got to do most of the flying, including the overhead break and landing, with Jive coaching me through that evolution. We started out with a stall series so I could see how the laminar flow wing handled at slower speeds. Because the center of lift is further back on the wings, the plane handles slower speeds nicely, with good control feel. The stall announces itself with a little rumble before it breaks. We did a couple straight ahead with 20 degrees of flaps and one in a turn, which had a sharper break.

Then it was on to aerobatic maneuvers. We started with some wing overs followed by some barrel rolls. Jive demoed each one, then I got to do a few in each direction. Next we did aileron rolls. The rolls started with a pitch up to about 45 degrees, then full aileron and some rudder input. The Mustang rolls quickly and smoothly. We started all the rolling maneuvers at 210 knots. Next Jive demoed a loop, which is entered at 260 knots. The loops were lots of fun, with around 3 Gs during the initial pull, which I really did not feel that much. I did a couple of those, then Jive demoed a Half Cuban Eight. I did one of those, then Jive demoed a four point roll. I tried one next, but mine turned out to be a three point roll.

After all that fun, it was time to head back to the airport. Jive briefed me on the overhead break on the way back and talked me through it all the way to touchdown. We came into the break at 1500 feet AGL and it was hard to get the airplane slowed down while decending in the pattern. That laminar wing really is low drag compared to the planes we normally fly.

A video was made of the entire flight, with three cameras mounted in the aircraft; one on the vertical stabilizer, one on the horizontal stabilizer and one in the cockpit, which Jive would switch to depending on what we were doing. After the flight we took pictures, then Jerry took us up to the briefing room for a review of the flight using the video. The entire experience, from the briefing through the flight and debrief with the video, took nearly three hours. All the folks at Stallion 51 provided a very professional and friendly experience of a lifetime for me, that will keep bringing a smile to my face every time I think about it! It was the best birthday present my wife, Deb, could have ever given me!

EAA237 COMING EVENTS

- Chapter 237 will be holding a pancake breakfast on Saturday, March 5 from 7:30 am until 11:00 am.
- Chapter 237 Aviation Explorer Post meetings will be held on Friday, March 11 and Friday, March 18 at the chapter building beginning at 7 pm.
- Chapter 237 Young Eagles Event will be held on Saturday, March 12 from 7:30 am until 2 pm at the Atlantic Aviation FBO
- IMC/VMC Club will be held on Thursday, March 17th via Zoom. The IMC meeting will begin at 6:30 pm and the VMC meeting will begin at 7:30 pm. An email with the link will be sent to all members prior to the meeting.
- Chapter 237 monthly in person meeting will be held on Monday, March 28th. Dinner will be served at 6 pm and the meeting will begin at 7 pm.

RECOMMENDATION: Because of the possiblity of changing events, we recommend checking our Chapter Events page and our Monthly Chapter Events Calendar on our website for the most current, updated information.

CHAPTER FLIGHT SIMULATOR

Our flight simulator uses several attached devices that contain an Arduino processor for the logic. They were designed and built by chapter members. These devices enhance the functionality and usability of our chapter flight simulator. To ensure that what has been developed will continue to be supported, most of the details about these devices has been posted on our chapter website under the Sim Arduino Projects page. This includes a description of what the device does and how it works as well as links to the actual Arduino source code. While this is very technical information, it does show the effort that has been put in by chapter members to make this a very useful and functional sim for our members to use.

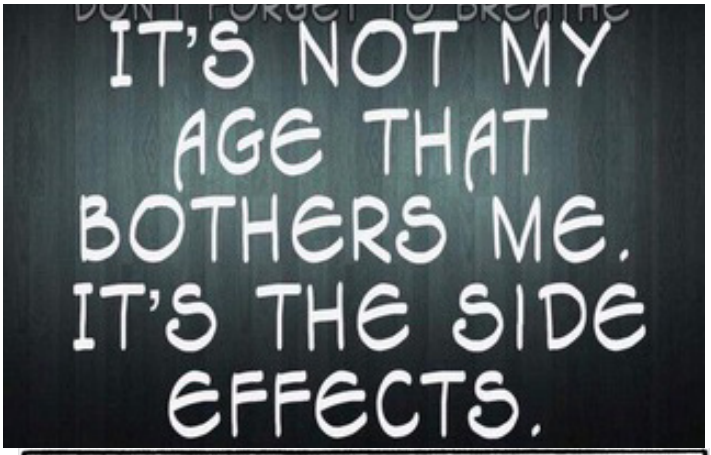
If you have thought about setting up your own flight simulator at home but are not sure if the PC you have at home will do the job, it's not that difficult to find out. You can download a free demo version of X-Plane 11 and give it a test run. Because it is a demo version, it will only run for a short period of time each time you start it and the scenery available is only for a couple of airports in the Renton, Washington state area. Still, it will give you an idea if you can make it work with the PC you have or if you would have to buy a new one. The chapter has a Thrustmaster T.16000M FCS joystick control (see picture attached) that you could borrow for a few days. This would make it easier to actually 'fly' the sim. The joystick allows you to control the ailerons (roll), the elevator (pitch), and the rudders (by twisting the grip). I use this same model joystick on my PC at home and it works well enough to get into the air and fly maneuvers and procedures. Just send us an email if you would like to borrow the Thrustmaster joystick.

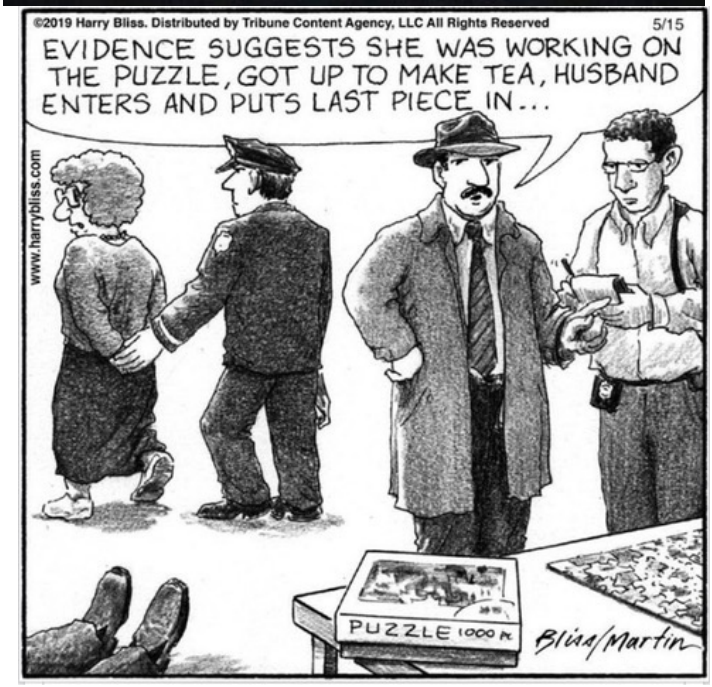
Finally, we mentioned in the last newsletter that we have a webpage with links to YouTube videos on Flying Techniques and Procedures on a Sim. I would like to call special attention to the one titled "Pre Takeoff Checklist" from PilotWorkShops. It not only provides some good habits to develop for a safe takeoff but also because it uses some recorded video from several X-Plane 11 simulator sessions. It's interesting how they incorporated this to produce a quality video presentation.

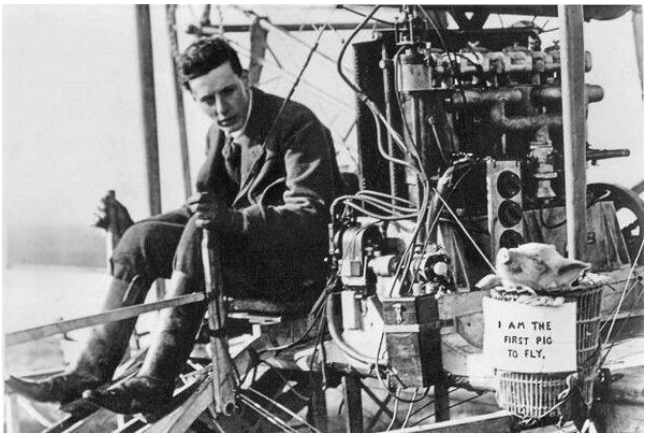
If you have questions about the simulator or are interested in getting checked out on the sim, please check out the Frequently Asked Questions page for more details. If you don't see an answer to your question there, then put it in an email and send it to: flight-sim@eaa237.org

Dave Peterson

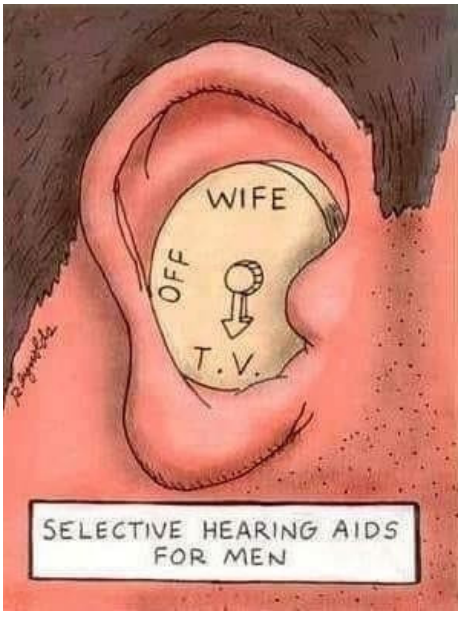
On The Lighter Side







The first flight of a pig took place at Leysdown, Kent, England. 1909.



In future Windsock editions, I plan to showcase aircraft that our members are building, restoring and flying. Please email me with the aircraft you are building, have completed building, are restoring or have purchased and are flying. I will follow up with you to provide a questionaire and will come out to take pictures to include with your article.

If you have a story or photo you would like to see in our newsletter, contact Frank Huber | eaap51@comcast.net | 763-245-0170

To view past issues of The Windsock, visit www.eaa237.org and select newsletters.

Articles and photos for consideration in our MARCH issue are due on or before MARCH 10.