



Editor: Frank Huber | Layout Editor: Frank Huber

The President's Flight Deck

Hello Chapter Members! Hopefully you have recovered from Air Venture 2023! I look forward to hearing some great stories from you at the August Chapter meeting. We will be hosting the Chapter meeting in person on Monday, August 28th. Social hour begins at 6:00PM when we will be serving hamburgers, hotdogs, corn on the cob, potato salad, and dessert.

Our guest speaker is Chapter member Bruce Hegedus. Bruce is currently a 747 pilot for a freight carrier. His schedule doesn't always align with our Chapter meetings, so it is extra special to have Bruce present to us. I think Bruce will provide an inspirational presentation for aspiring air transport pilots in our Chapter, as well as just entertainment for us older pilots, who wish to know more about the big iron.

It has been quite a few years since we have held a Chapter picnic. Tenured members tell me this was an annual event that was a lot of fun. It is a great fellowship opportunity for those members whom are unable to attend Chapter meetings. We have selected Sunday, September 10th to host the picnic. The Chapter will provide the grilled protein and beverages, and members can bring salads, dessert, etc. We will host the event on the apron near the U of M building as was done in the past. This is a great opportunity for members to fly their planes to the picnic, or to show off your project. Watch for a sign-up genius for this event.

I am looking forward to seeing you at the Chapter meeting!

Kevin



YOUR CHAPTER BOARD OFFICIERS

Kevin Sislo, President
Ellen Quist, Secretary
Charles Jasicki, Director

Robert Henkes, Vice President
Mark Heule, Treasurer
Michael Grzincich, Director

Contact the Board at: board@eaa237.org



Jeff Mullins Wins Two Awards At Air Venture For His Outstanding Pegaziar

Chapter 237 member Jeff Mullins received two awards at Air Venture last month. He received the Stan Diezik Memorial Award for Outstanding Design Contribution for all of the unique technical design features he had built into his aircraft. He also received the Plans Built Outstanding Workmanship award for what any chapter members, who have seen his aircraft, know is an extremely well built aircraft with great attention to all the details. Way to go Jeff!

Jeff discusses below the judging process and the reception his aircraft received during his days spent at Air Venture.



I knew it was going to be a special week for the Pegaziar shortly after I landed on Friday before the show, when the volunteer ground parking staff put my plane right in front of the Brown Arch. Two of the staff members told me as soon as they saw it, knew it was something unique and special and wanted it at show center.

When I registered the plane to be judged, they told me the judges initial a small 2 1/2 inch green square on the prop card but only if they like the plane. They said if you get three or four that is not very good. If you get ten your doing well and whole card is covered you will probably win an award. The prop card for the Pegazair was completely covered with initials.

While the judges were looking at my plane I did mention to a couple of them how I had designed a microprocessor system to monitor the primary ECU for failure to drive the fuel injectors and automatically switch to the backup ECU. I only told a couple of them about that system on Monday and Tuesday, I had also mentioned to them some of the custom features that were not in the original plans. On Wednesday a group of judges about ten or more were converged around my plane when I returned from the pilot briefing for the air to air photo shoot. They starting asking me questions about the system I designed. I had a spare circuit card and was able to explain to the them the functions of the system in more detail. Several of them told me they were really impressed with the thought and technology I had put into the systems design of the plane. They said they just don't see that type of thought and engineering in most home built aircraft. It was the work on the microprocessor fuel injector monitor that won the Stan Diezik Memorial Award for Outstanding Design Contribution. The other award was for Plans Built Outstanding Workmanship. The public also gave me an unofficial award in the form of dead trampled grass around my plane. I could hardly talk at the end of each day after explaining dozens of times how the wing slats worked and the other features of the plane.

Then to top it off knowing EAA selected the Pegaziar to be in an upcoming Sport Aviation article was also a huge honor. In the time I have been around EAA237 this will be the forth article written about EAA237 chapter members airplanes. Something I hope all Chapter 237 members can be proud of. Jeff



HOMEBUILDERS

WHAT OUR MEMBERS ARE BUILDING, RESTORING AND FLYING

Steven Campbell's Cozy MK IV

Chapter 237 member Steve Campbell began construction of his Cozy MK IV in 2001. He completed construction and received an airworthiness certificate in 2016. He had equipped his aircraft with a PLZ-Franklin 220 hp engine. The Franklin engine business was purchased by the Polish government in 1975 and apparently went with piston rings that were made from a harder grade of steel. This cause problems for Steve being unable to get the rings to properly seat in which resulted in lower power, and fouled plugs on the lower cylinders. Ultimately he had the engine overhauled with new rings and other original Franklin engine parts. This cost him nearly four years of flying, but now his engine is running great. Steve is using a Catto three bladed pusher prop and has a instrument panel with normal steam gauges. Hie is planning to upgrade to a EFIS system using either a Dynon Skyview system or a GRT system. He added a CPI electronic ignition system to replace a Slick mag for which parts were no longer available. This has improved the fuel economy and allows the engine to idle much better.

Performance wise, the Cozy doesn't really stall with the forward canard wing, rather it mashes down at 300 to 400 fpm. The aircraft will cruise at 155 mph at 2400 rpm and will go 200 mph at 2800 rpm burning considerable more fuel. The aircraft will climb out at 500 to 600 fpm, mainly limited by engine cooling. The Cozy has two 26 gallon fuel tanks in the wing strakes. This gives him a range of 750 to 800 mile range burning around 10 gallon per hour. He flies his landing approach at 90 knots slowing to 80 knots over the fence and uses power to fly the aircraft onto the ground without a normal flare. Steve uses 3000 feet as a minimum for airport destinations.

Steve said he really enjoyed the building process and acknowledged a good support system. Interestingly the Cozy aircraft were designed by a former Chapter 237 member, Nat Puffer, who has since moved to Arizona. He said sanding and painting were the two things he hated the most, so he had the aircraft painted in 2021 at Boss Aircraft Refinishers in Salisbury, NC. Steve is planning to take some more longer trips and has been flying Young Eagles this summer at chapter events.. *By Frank Huber*





Chapter 237 Supports Forest Lake Chapter 1638 Young Eagle Event



Forest Lake EAA Chapter 1638 held a very successful Young Eagle event on Saturday August 12. Chapter 237 members helped with ground operations and with the flying. There were eight pilots, who flew fifty-seven flights with ninety-two Young Eagles. Seventy-two of the Young Eagles were first time flyers. Chapter 237 pilots Mike Miller, Michael Grzincich and Joe Gmitter flew forty-nine Young Eagles. Two of the Chapter 1638 pilots flew their first Young Eagle flights at the event. There were thirty-three girls and fifty-nine boys, who went flying during the event. The local Civil Air Patrol group was there to assist with the ground operations. The next Chapter 237 Young Eagles event will be held on Saturday, September 9 at Atlantic Aviation from

9am until 2 pm. As always all chapter members are invited to come out to help with the event, talk with the participants and their parents and enjoy watching young people enjoy the fun of flying.



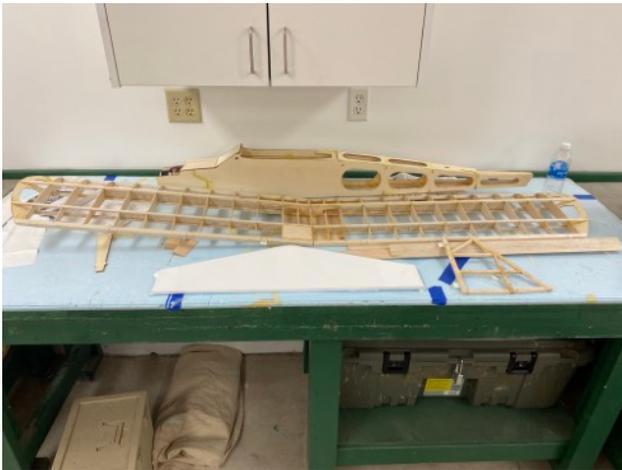
Ray Aviation Scholar Sawyer Hahn successfully completed his Private Pilot check ride on Wednesday, August 9. Sawyer did his training out of the Crystal Airport flying in the Civil Air Patrol Cadet Flight Training program in the Civil Air Patrol aircraft. The instructors in the program work with the young cadets for free. The students are only required to pay for the fuel and a small fee. Sawyer plans to continue his flight training with the goal of becoming a professional pilot.

Ray Scholar JJ Runde, who passed his PPL check ride on March 26 is heading off to the University of North Dakota to continue his training in their professional aviation training program. JJ worked very hard during his training and was an active member of our chapter. We wish him the best of luck as he works towards a career as an airline pilot.





Our chapter Aviation Explorer Post met on Friday, August 18. They continued work on their RC build project. They have completed construction of all the structures and have begun the covering process. They have set up a computer driven simulator to practice flying the RC aircraft for when the project is completed. The Aviation Explorer Post is a great organization for young people interested in learning more about all aspects of aviation. If you know of a young person with an interest in aviation please tell them about our chapters organization. They meet on the first and third Friday of every month at 7pm at the chapter building, unless they have an outing to an aviation related venue.



237th Aero Squadron Zenith 701

The testing and adjustments to the Zenith 701 has continued. After the fourth flight was flown, we determined that a deeper cooling plenum needs to be made for adequate cooling. We also decided we needed cooling for the upper portion of the engine because of the tight cowling. So we added two round 2 inch intake openings in the front of the cowling and two 12 inch louvers on the side of the cowling doors. After adjusting the prop to the lowest pitch setting, we determined the need to reduce the diameter of the propeller to get more rpm therefore more power out of the engine. So a inch and a half was removed from each blade. We also replaced the pitot tube with another Zenith one because we were seeing erroneous readings at slow speeds on the previous test flights.

Jon Swenson happened to come across a website of an Australian pilot, who had removed the leading edge slats on his Savannah, which looks like a Zenith 701 on the advice of some Columbian Zenith 701 pilots he met at Sun N Fun in 1990. In doing so he got increased performance in climb, cruise speed, glide and improved landings. He thoroughly tested his aircraft with and without the slats to verify the findings. He later added vortex generators (VGs) and found he got almost the same slow speed performance at a lower angle of attack and without all the drag the slats create. The Italian manufacturer of the Savannah added a model without the slats but with VGs and many Australian pilots have taken the slats off their Zenith 701s and added slats. I had found our aircraft to be very draggy on the first four test flights, so we took the slats off. Because of the windy weather this week I wasn't able to test out all these changes until Friday, August 17.

I saw 5880 rpm on takeoff, which is nearly full power and significantly better than the previous flight. The aircraft climbed at 600 fpm which was 20% better than the 500 fpm of the previous flights. On level off the aircraft accelerated to 88 mph at 5880 rpm, which is excellent. I found the plane handled better and was flying at a lower pitch attitude. The changes to the cooling worked great, with the water temperature steady at 240 F, which is normal. I did a stall series, with it stalling at 43 mph clean, 41 mph with 1/3 flaps and 40 mph with 2/3 flaps. Without the slats, the aircraft

buffeted at bit and actually gave a slight stall break. The aircraft with slats was stalling out 50 mph with no break and just a steady mush downward. Coming back to land the aircraft felt like it was gliding better, although it is still a high drag aircraft with that fat wing. The take off and landing felt much more smooth and controllable. So overall I think the aircraft without the slats flies much better and will be a safer aircraft to fly, since removing the slats decreases the drag significantly. The Australian pilot, who wrote the article, has since started a business selling the VGs. So a set was ordered and should be arriving this week. We also plan to add some VGs to the horizontal stabilizer to improve the handling in pitch.

Late in the flight the oil pressure dropped to 19 psi and was indicating 4 psi on the ground. So we will be changing the oil, checking the oil filter and try to figure out why the oil pressure dropped. We are also getting some oil residue from the crankcase breather tube, so we will have to add an oil separator to stop that. We also have a heavy left wing since the slats were removed, so some adjustments will be made to fix that. I checked the fuel usage on this recent flight of about an hour, which came in around four gallons. So it is going to be an economical aircraft to operate. Overall it's been a fun process working through the issues with the aircraft as we move through EAA's Task Based Flight Test Program. I hope to quickly finish that up as soon as we get everything working correctly, so all the flying club members can start fly this fun aircraft.



Chapter 237 Coming Events

- * Chapter Meeting on Monday , August 28 beginning at 6pm with dinner, meeting to follow at 7pm
- * Chapter Aviation Explorer Post meetings Friday September 1 and September 15 at 7pm
- * Chapter 237 Young Eagles Event at Atlantic Aviation on Saturday, September 9 from 9am to 2pm
- * VMC/IMC Meeting on Tuesday, September 19 VMC begins at 6:30 pm and IMC at 7:30 pm
- * Chapter Meeting on Monday , September 25 beginning at 6pm with dinner, meeting to follow at 7pm



boldmethod

Quiz: Do You Know These 6 Common Approach Chart Symbols?

<https://www.boldmethod.com/blog/quizzes/2023/08/do-you-know-these-six-common-approach-symbols/>

5 Ways To Help ATC On Your Next IFR Flight

<https://www.boldmethod.com/lists/2023/08/five-ways-to-help-atc-on-your-next-flight/>

Quiz: 6 Questions To See If You Can Hold Like A Pro

<https://www.boldmethod.com/blog/quizzes/2023/08/six-holding-questions-to-see-if-you-can-hold-like-a-pro/>

7 Items You Should Brief Before Every Instrument Departure

<https://www.boldmethod.com/blog/lists/2023/07/brief-these-seven-things-before-every-instrument-departure/>

Quiz: Can You Answer These 6 IFR Regs

<https://www.boldmethod.com/blog/quizzes/2023/07/6-ifr-regulation-fars-questions-can-you-answer-them/>

Should You Go Missed If You Fly Past The VDP On An Instrument Approach?

<https://www.boldmethod.com/learn-to-fly/navigation/should-you-go-missed-if-you-fly-past-the-vdp/>

boldmethod

Elevator Trim Stall: How To Prevent It From Happening To You

<https://rb.gy/foyv5>

7 Radio Tips From a Tower Controller

<https://www.boldmethod.com/learn-to-fly/radio-procedures/seven-radio-tips-from-an-atc-tower-controller-what-to-say-on-mic/>

5 Common Mistakes To Avoid When You Start Your Engine

<https://www.boldmethod.com/blog/lists/2023/08/avoid-these-five-mistakes-when-starting-your-engine/>

How To Avoid Wake Turbulence During Takeoff and Landing

<https://www.boldmethod.com/learn-to-fly/aerodynamics/how-to-avoid-wake-turbulence-during-takeoff-landing/>

Quiz: Can You Answer These 7 Stall Questions?

<https://www.boldmethod.com/blog/quizzes/2023/07/can-you-answer-these-seven-aircraft-stall-questions/>

9 Times You Should Go-Around

<https://www.boldmethod.com/blog/lists/2023/06/nine-times-you-should-go-around/>



AIR FACTS JOURNAL

Go or No Go: Never Judge a Forecast by Its Radar Image by *John Zimmerman*

https://airfactsjournal.com/2023/08/go-or-no-go-never-judge-a-forecast-by-its-radar-image/?trk_msg=QU5R8CPQGF2KH2B9HO3GQNPC1G&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=N34A9C TBG49C7DEUEJD72ALPQ0&trk_link=FC8HOVVOTS24DC3TF5I739DCNO&utm_source=listrak&utm_medium=Email&utm_term=Go+or+No+Go:+Never+Judge+a+Forecast+by+Its+Radar+Image&utm_campaign=F23082A&utm_content=Is+Your+Maintenance+Legal,+Safe+or+Neither+++Go+or+No+Go

QUICK LINKS

AIR FACTS

One hour closer to your first accident *by David Yonker*

<https://airfactsjournal.com/2023/07/one-hour-closer-to-your-first-accident/?>

trk_msg=QU5R8CPQGF2KH2B9HO3GQNPC1G&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=N34A9CTBG49C7DEUEJD72ALPQ0&trk_link=QKHIB8QLUBA4V0NKQ6F037MRAO&utm_source=listrak&utm_medium=Email&utm_term=One+Hour+Closer+to+Your+First+Accident&utm_campaign=F23082A&utm_content=Is+Your+Maintenance+Legal,+Safe+or+Neither+++Go+or+No+Go

Hard lessons learned *BY STEVE RUTHERFORD*

<https://airfactsjournal.com/2023/08/hard-lessons-learned/?>

trk_msg=QU5R8CPQGF2KH2B9HO3GQNPC1G&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=N34A9CTBG49C7DEUEJD72ALPQ0&trk_link=HD4JF9ENU1G477PRSMT805BEG4&utm_source=listrak&utm_medium=Email&utm_term=Hard+Lessons+Learned&utm_campaign=F23082A&utm_content=Is+Your+Maintenance+Legal,+Safe+or+Neither+++Go+or+No+Go

Is your airplane maintenance legal, safe, or neither? *BY JAY WISCHKAEMPER*

<https://airfactsjournal.com/2023/08/is-it-just-legal-or-is-it-safe-or-is-it-neither/?>

trk_msg=QU5R8CPQGF2KH2B9HO3GQNPC1G&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=N34A9CTBG49C7DEUEJD72ALPQ0&trk_link=JA8QDJME1SP43A7BFT5SKO1JOO&utm_source=listrak&utm_medium=Email&utm_term=Is+Your+Airplane+Maintenance+Legal,+Safe,+or+Neither?&utm_campaign=F23082A&utm_content=Is+Your+Maintenance+Legal,+Safe+or+Neither+++Go+or+No+Go

From my love of aviation comes the Freedom Aviation Network *BY STEPHANIE LAMAR*

<https://airfactsjournal.com/2023/07/from-my-love-of-aviation-comes-the-freedom-aviation-network/?>

trk_msg=0ELBS6RDEKA438OTO52DI33900&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=VQCA9662KAQRIT6V5Q1PNFJ90K&trk_link=F55CASFLOGCKLCNAHJ675NGP3S&utm_source=listrak&utm_medium=Email&utm_term=From+My+Love+of+Aviation+Comes+the+Freedom+Aviation+Network&utm_campaign=F23075A&utm_content=We+Need+Better+Ramp+Etiquette+++How+a+Horrific+Accident+Forged+One+Pilot's+Journey

Fly-by-wire for beginners *BY ENDERSON RAFAEL*

<https://airfactsjournal.com/2022/11/fly-by-wire-for-beginners/>

Loss of control: turning over a new leaf *BY LARRY AND ROBERT DUNN*

<https://airfactsjournal.com/2023/01/loss-of-control-turning-over-a-new-leaf/>

Landings at the crosswind limit *BY MAC MCCLELLAN*

<https://airfactsjournal.com/2021/04/landings-at-the-crosswind-limit/>

AVweb

AirVenture By The Numbers: 2023 Was, Indeed, A Record Year

<https://www.avweb.com/air-shows-events/airventure/airventure-by-the-numbers-2023-was-indeed-a-record-year/>

MASTERY FLIGHT TRAINING , INC

PURSUE MASTERY OF FLIGHT

Thomas P. Turner
ATP/CFI/CFII/MEI
Flight Instructor Hall of Fame 2015 Inductee
2021 Jack Eggspuehler Award winner

This week's *LESSONS*

Many were talking about a fatal midair collision in the nontowered ultralight/rotorcraft pattern during the airshow at Oshkosh last week. Some unofficial details have leaked from the crowd, all unsubstantiated, but they remind us to review ideas for collision avoidance in and out of the airport traffic area.

Although the threat is terrifying, there are **things we can do** to avoid midair collisions. In his book [See and Avoid](#) (Times Journal Publishing Company, Oklahoma City, OK 1988), then-aerobatics instructor Fred G. DeLacerda tells us how we can quantify the threat of a midair collision, and more

DeLacerda says the typical midair collision follows this pattern:

- They usually take place in daylight hours.
- Skies are usually clear and visibility unrestricted at the time of the collision.
- Most often the airplanes are not talking to Air Traffic Control.
- Midairs usually happen at a slow speed and within 3000 feet of the ground, with a faster airplane overtaking a slower one -- more than one-third (35%) of the time the faster airplane comes directly from behind. The airplanes approach head-on only five percent of the time.
- 75% of all midairs happen within five miles of an airport.
- Half of the pilots involved have over 1000 total flying hours; of those with fewer than 1000 total time, pilots with fewer than 100 hours are the most frequently involved.
- Midair collisions are almost universally fatal.

Seeing other air traffic in time to evaluate the threat of collision, and to maneuver to avoid impact as required, demands we consider:

- **Window obstructions:** Remove all cabin shades and open all curtains before flight. Bugs or bird-dropping smears may hide airplanes until it's too late. If windows or the windscreen is scratched or crazed enough so can't see out, the airplane isn't airworthy.
- **Your eyes:** Wear glasses if you need them -- don't let pride lead to a collision. Use non-polarized sunglasses in sunny weather (to improve vision, and also to be able to see modern avionics displays). If you have poor night vision, don't fly at night.
- **Your passengers:** Passengers have useful sets of eyes too. Brief passengers before takeoff that they should point out any airplane they see in flight.
- **Air Traffic Control:** ATC is a great help to you in avoiding collisions. But don't delegate traffic avoidance entirely to ATC. **You're still responsible to see and avoid.**
- **Airport traffic patterns:** Don't shortcut the suggested pattern at non-towered airports. It's designed to make you **predictable, and therefore avoidable**, to other pilots.
- **Radio calls:** Use your radio as suggested in the Aeronautical Information Manual. But never assume no one's there just because you hear nothing on the radio.

Reaction time is another factor. DeLacerda's research states it takes **one-tenth of a second** for the average pilot to see an airplane at the distance of four miles, and for that information to transmit to the pilot's brain. **About a second** lapses while the pilot's brain recognizes that object as an airplane. It takes **five more seconds** to determine if there's a danger of collision.

Cockpit traffic detectors are a tremendous boost to traffic avoidance. I've done quite a bit of flight instruction in detector- and ADS-B-equipped airplanes, and find it much easier to **see and avoid** other aircraft with an initial warning from the panel. **Like any technology**, traffic detectors have their limitations. Most rely on the other airplane to be transponder equipped and with the unit turned on.

Next, the typical pilot requires **four seconds** to decide about an evasive maneuver, and **half a second** to command his/her muscles to make a control input. The airplane's lag time between control input and the beginning of the evasive maneuver is **one to two seconds**.

According to DeLacerda, then, it takes **a minimum of 11.5 to 12.5 seconds to see and avoid** an airplane on a collision course. If you are closing on another airplane with a relative speed of 60 knots, such as when overtaking a slower airplane or on an intersecting course, you'll travel almost a quarter mile between identifying a threat and the beginning of your airplane's evasive maneuver—if you see the airplane and act immediately.

An airplane on a collision path will have no relative movement. The human eye is more sensitive to movement in peripheral vision. An object that is not moving is harder to detect since there's no relative motion. **You must actively scan the sky.**

Transponders and traffic detectors use line-of-sight transmission. Care is necessary to mount transponder antennas where portions of the airplane's own structure will not block the signal. This is why ADS-B and other detector-equipped airplanes have multiple transponder antennas, including on top of the fuselage. This explains why not all transponder-equipped airplanes will appear on in-cockpit traffic displays. If a "target" airplane is in most locations relative to the display-equipped aircraft its transponder reply will be detected and the target plotted.

But at times the signal may be blocked by the aircraft itself; the traffic may get within a mile or two of the display-equipped airplane and then "disappear" from the screen. The proper use of traffic displays is to make it easier to visually acquire other airplanes. Not all aircraft will appear on your display, but the technology helps you know where to look out the window to more rapidly find potential conflicts.

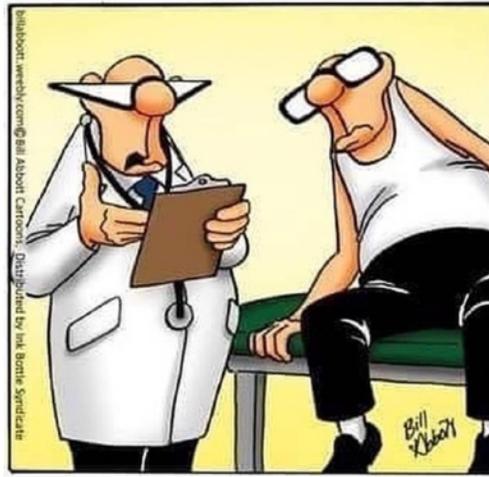
Even if you're IFR, you're responsible to see and avoid other traffic any time you're in visual meteorological conditions (VMC). Remember the VFR requirements for visibility and cloud clearance—pop out of a cumulus on an IFR flight and you may be as close as 2000 feet from a VFR airplane climbing or descending legally through your altitude, a distance your 150-knot cruiser will cover in about 12 seconds...DeLacerda's computed avoidance time. Climb or descend through the cloud and you'll be even closer to the legal VFR airplane. Drop down to minimums on an instrument approach into a nontowered airport, and a VFR pilot may be (legally) immediately below the cloud bases in one-mile visibility. Your eyes, and the other pilot's, are the final means to avoid a collision.

Despite the chatter, we don't know what led to the tragedy that killed two and injured two others during the exciting or Oshkosh. If any good can come from it, it would be that it reminds us to work smarter to **see and avoid**.

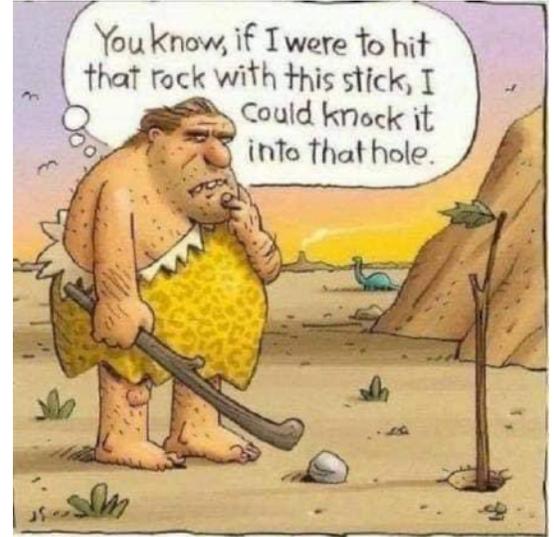
On The Lighter Side



"OK, Mrs. Dunn. We'll slide you in there, scan your brain, and see if we can find out why you've been having these spells of claustrophobia."



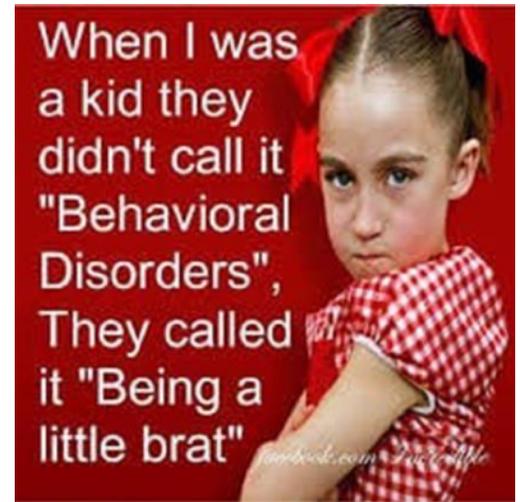
"High sodium, high cholesterol, lots of toxins - your blood test is remarkably similar to a potato chip."



How Man Learned to Swear.



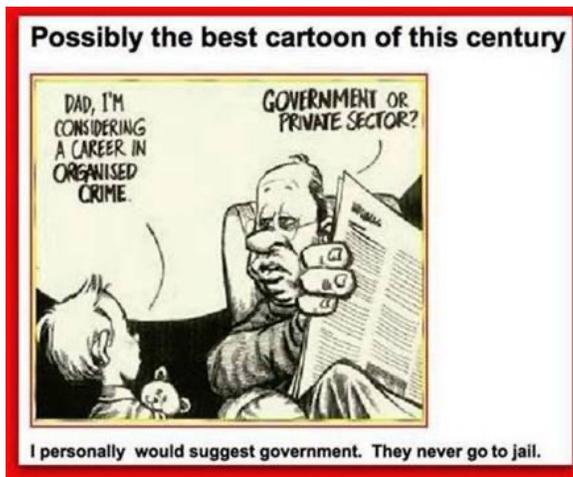
I've done some terrible things for money ...like getting up early to go to work.



When I was a kid they didn't call it "Behavioral Disorders", They called it "Being a little brat"



Relaxing after winning an argument with wife



Possibly the best cartoon of this century



I personally would suggest government. They never go to jail.



In future Windssock 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 questionnaire 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 Windssock, visit www.eaa237.org and select newsletters.



Ellen Quist

Commercial Pilot
CFI / CFII

Cell: 763.222.4952
ellen@flyhalf.aero

@flyhalf_aero https://flyhalf.aero



I Buy Used Avionics!

Do you have something to sell?

I am a student pilot, and I fund my flight lessons by selling used avionics, and other aircraft parts. Let's help each other!

Please contact me! (Text or email preferred.)

JC's Aviation Sales jcroft0001@gmail.com
Minneapolis, MN 763-561-8945



Donald Huettl
Custom3D LLC
Cell: 763-634-1349
DAHUETTL@GMAIL.COM

Oil cap more than "finger-tight" – mine was!




Bob Henkes

• Auto • Home • Life • Business •

Office (651) 489-1347
Fax (651) 489-5403
236 Larpenteur Ave. W • St. Paul, MN 55113
Bob@QualityInsuranceService.com
www.QualityInsuranceService.com

FLIGHT INSTRUCTION
Ground Instruction
Flight Instruction



Cheryl Ann Daml
CFI, CFII, Commercial Pilot
C. 612-272-9717
cdaml@msn.com

Anoka County Airport/Blaine (KANE)

EAA Chapter 237
1st AirVenture Chapter Grand Champion



Gary Laurich
EAA Tech Counselor/Flight Advisor

Chapter Hangar
8891 Airport Road NE, Box C-12
Blaine, MN 55449

763-242-3564
gary.laurich16@gmail.com
www.eaa237.org

Chapter Meetings:
4th Monday of the month
Dinner Social: 6:00 pm
Meeting Starts: 7:00 pm



DAVID A. AUTIO
Certificated Flight Instructor
CFI/CFII/IGI

Phone: (763) 755-0350
Mobile: (763) 229-4987
Email: dautio0350@comcast.net 401 117th Ave NW
Airport: Anoka/Blaine Airport (KANE) Coon Rapids, MN 55448

Flying Star Products

I sell premium split point drills and taps for all your shop and aircraft building needs.

Made in the USA.

Bob Heavirland | 651-324-0792
rheavirland@yahoo.com