# **NEWS AND VIEWS**

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### **Coming Events**

- Next COPA 26 Meeting is Tuesday May 9, 2023. Details to follow.
- The Pilot Decision Making (PDM) Workshop is a monthly videobased meeting of pilots to discuss pilot decision making (air and ground). Pilots of all experience levels and ratings are welcome. Meetings are on Zoom, the first Wednesday of each month, at 7 pm. To join, send an email to cykf.pilotworkshop@gmail.com. Next meeting is May 3, 2023.

### In this Issue!

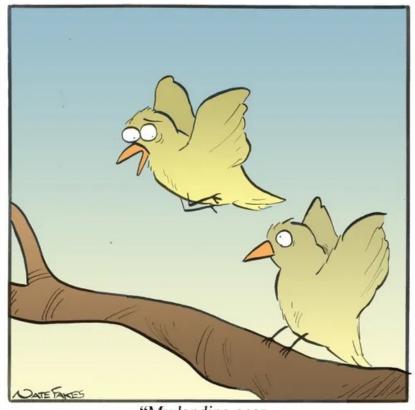
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# Welcome!



#### Brainteaser By Warren Cresswell

#### THREE GREEN, GOOD TO LAND



"My landing gear won't come down. I have a cramp."

#### **COPA 26 Breslau Flyers**

#### Coming Events!

- Our planned May speaker is a Sunwing Pilot (and WWFC Instructor) who organized the recent Elevate Aviation initiative at the airport. She will talk about her aviation journey (subject to her Sunwing flight schedule). Hopefully some 99's can make it out!
- Our June meeting will be a BBQ hosted by Hammond Aviation, likely at Hangar 51 on the field. Further details will follow.....
- The Trillium Aviators will be starting their week-day fly-out lunches with a revised schedule. Flights will now be bi-weekly, on Wednesdays, with Thursday as a rain date. The first flight this year will be to Kincardine on May 31, 2023. Contact the Editor (geoff.gartshore@gmail.com) if you wish to be on Ivan's mailing list.

Some years ago, at Toronto Buttonville Airport, two pilots, co-owners in their Beech Bonanza, were flying two young kids during a Young Eagles event. Sometime after departure, the right-side cabin door popped open.

A door popping open in a Bonanza is not an emergency situation but does create an initial surprise, a lot of noise and a continuous blast of wind in the cockpit. The aerodynamics of the Bonanza are such that, no matter how hard you try, the door cannot be closed in flight. Fortunately, the Bonanza, with the cabin door ajar, will fly perfectly well using normal power and configuration settings.

In this case, the pilot flying in the left seat turned back towards the airport and returned to the traffic pattern with ATC clearing him for a straight-in to Runway 15. Meanwhile, the right- seat pilot tried to pull in and hold the door closed as much as possible whilst simultaneously attempting to calm and reassure the alarmed Young Eagles in the backseat.

Circumstances worsened when the strong wind gusting into the cockpit blew right-seater's headset right off his head. Remaining focused on his primary tasks of holding the door in as far as possible and reassuring the kids in the backseat, the right-side pilot did not attempt to put his headset back on for the balance of the flight. Accordingly, the two pilots were no longer in intercom communication. The pilot flying continued inbound and flew a perfect final approach course aiming for a landing on Runway 15.

Unfortunately, each pilot thought the other was going to handle the gear extension. However neither did. ATC spotted the gear-up status too late to radio a warning. You can guess the rest: the aircraft landed gear up, right on the centreline, coming to a quite sudden stop. As is often the case in these gear-up landings, the passengers and pilots were unhurt, but the aircraft sustained costly belly, prop and engine damage which cost a considerable sum to repair.

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May-June 2023

This article intends to outline the issues related to gear-up landings and gear collapses. For brevity, throughout this article these occurrences will be referred to as Landing Gear Related Mishaps ("LGRMs").

This article will outline the major causes of LGRMs, highlight specific situations that correlate highly with LGRMs and make suggestions as to how to avoid falling victim to one yourself.

The literature on gear-ups and gear collapses is full of such sayings as, "there are those who have, and those who will," [have an LGRM]. The inference is that it is inevitable that every pilot flying a retractable aircraft will eventually have one. This article seeks to refute this pessimistic thinking and encourage pilots that, with an awareness of the situations carrying a higher risk of LGRMs, training, use of "Best Practices" in operations and solid maintenance, gear ups/gear collapses are **NOT** inevitable.

While you may not fly a retractable aircraft there may still be some value herein, because the principles of recognition and avoidance can also translate to other pilot errors.

Firstly, it must be acknowledged that <u>THERE ARE A LOT</u> of gear up accidents/incidents in the light GA aircraft, and many of these accidents/incidents are self-inflicted by pilots. <u>Human factors play a very</u> <u>large role in LGRMs</u>, far more than occurrences due to true mechanical failures.

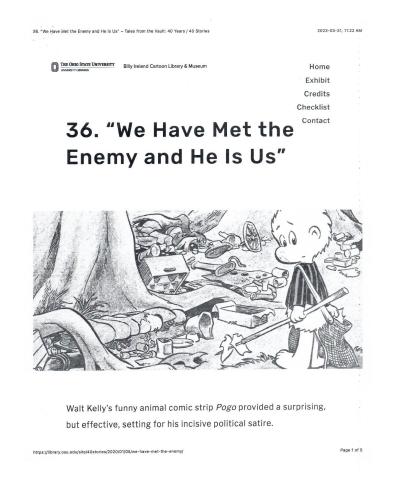
FAA accident/incident research (1984-2004) evaluated 62,037 accidents/incidents for light GA aircraft. Of all causes, there were 7,007 gear related accidents/incidents (LGRMs) – <u>an average of 350</u> events per year or just under one per day. The LGRMs accounted for <u>11.3% of all accident/incident</u> causes. Part 91 operators (mostly private flying) accounted for 95% of the gear-up/gear collapse events.

A separate FAA study by a FAAST team confirmed the very high role human factors play in these LGRMs. The FAAST team studied accident/incident statistics for a five-year period: 2002-2006. Of 1,858 LGRMs, only about 5% resulted from true mechanical failure of landing gear systems. The vast majority were pilot-induced errors. The implication is that the incidence of LGRM's could be significantly reduced if pilots could only do a better job of operating their landing gear.

Canadian pilots are not faring any better than their American cousins. Canadian TSB accident statistics for 2011-2021 indicate that LGRMs accounted for 11.7% of all accidents – a result which mirrors the FAA research very closely.

The amount of LGRMs and the apparent failure to reduce them is both frustrating and expensive, especially since so many are caused by human factors and should be preventable. With the high costs of repairs to propellers, engines and airframes, sometimes involving complete write-offs for some aircraft, LGRMs are probably costing North American pilots and their insurers \$40-\$50 million or more each year. Even if you never have a LGRM, other pilots are experiencing such accidents/ incidents, and this is driving up every pilot's insurance costs.

# IF WE PILOTS WANT TO IMPROVE ON THIS LGRM RATE, WE MUST ACKNOWLEDGE THAT IT IS THE PILOT'S ACTIONS THAT CAN MAKE THE BIGGEST DIFFERENCE.



#### HOW DO LGRMs occur? Simply put they come in three flavours:

- The oops I forgot to lower the landing gear the classic gear-up landing.
- The gear collapses on the landing roll, but not because of any known mechanical problem, instead usually by some action or inaction on the part of the pilot.
- The true mechanical failure, in which there is nothing that can be done from the cockpit to completely extend the gear.

Historically, LGRMs are about evenly split between the OOPS version and gear collapse on the landing touchdown/rollout. As the FAA FAAST team found, true mechanical gear system failures are only a tiny minority of all LGRMs.

#### A more important question is: WHY DO LGRMs occur?

#### Simply Forgot to Extend the Gear

Quite simply pilots sometimes just forget to extend the landing gear.

"Late saves which fail" is another reason. These occur when the pilot discovers the gear is not down, initiates extension but is too late. The gear cycle time exceeds the time remaining before touchdown and the aircraft lands gear-up or with gear collapsed on the runway.

#### **Distractions**

Distractions can occur which throw the pilot off his/her normal pre-landing routine with the result that the gear extension gets missed. We saw this in the Bonanza case at the beginning of this article where in fact, there were, two distractions: the cabin door popping open, and the headset being blown off the head of the right-seat pilot. Other distractions might be things such as: Noisy passengers, sick passengers, small children, pets, system abnormalities, emergencies, conflicting traffic, out of ordinary ATC instructions, turbulence, missed approaches etc.

#### Failure to Verify The Gear is Actually Extended

Pilots sometimes move the gear handle/switch into the down position but then move onto other tasks and fail to cross-check and verify that the gear successfully completes the full extension cycle.

#### **Visual Illusions**

When a strong headwind for final approach is encountered the sight picture of the descent angle and visual speed perceptions when the gear is NOT down, can look the same, or almost the same, as when landing in lower winds with the gear extended. The pilot can be fooled by this visual illusion and conclude that the landing gear has been extended when, in fact, it has not.

#### **Alternator/Electrical Failure**

Upon reaching your airport of landing there may not be enough remaining electricity to fully extend and lock the landing gear down for landing. Electrically operated landing gear may not be able to be extended, might be only partially lowered, or appear to be down but not locked resulting in a gear collapse on touchdown.

#### Multi-crew Member or Instructor/Examiner On Board

If the responsibilities among multi-crew members for actions are not clearly defined, things can fall between the cracks, as we saw in the Bonanza example.

One multi-crew situation that correlates highly with LGRMs is when a pilot is training for simulated gear failures under the direction of an instructor on-board. The circuit breaker that is pulled by the

instructor to begin the simulation is sometimes not reset prior to the subsequent real landing leading to a real gear failure.

#### **Continuous Circuits/ Touch and Go Landings**

Both of these activities have a high correlation with LGRMs. In the case of continuous circuits some pilots attempt to save gear cycles by not raising their gear during continuous circuits. The risk is that the pilot loses track of whether the gear is actually up or down for landing.

For Touch and Go's, particularly in aircraft where there is a lot to do to reconfigure the aircraft for takeoff while on the roll, the main risk is accidentally retracting the landing gear when the pilot intends instead to be raising the flaps. Another risk is inadequate weight and/or time on the main wheels during the Touch and Go, thus preventing the squat switches from doing their job of preventing the landing gear from retracting even when the gear handle/switch is placed in the up position.



# Aircraft Reconfiguration After Landing and Before the Aircraft Has Come to a Full Stop on the Runway or Exiting the Runway.

This also correlates very highly with the gear collapse component of LGRMs and is similar to that for Touch and Go's noted above. The pilot may attempt to raise the flaps to add more weight on the mains for a more solid and controllable contact with the runway, particularly in windy or turbulent conditions. Or maybe the pilot just wants to expedite the after-landing clean-up. The risk is confusing the flap switch for the gear resulting in an unintentional gear retraction.

#### **Knowledge of Landing Gear Systems**

Some LGRMs simply result from the pilot having insufficient knowledge of the installed landing gear system, including aural gear warning or visual gear warning lights and/or its emergency gear system. An example would be not following the proper emergency gear procedure resulting in a gear-up or gear collapse event.

#### **Pre-flight Inspection**

Failure to do a thorough pre-flight of the aircraft can result in a LGRM. Accumulated ice, mud or other debris in the wheel wells, or some other obvious system abnormality not observed during a pre-flight inspection, could have serious consequences for the flight.

#### Lack of Attention to Maintenance

Not regularly attending to landing gear system maintenance is yet another cause of LGRMs. Not attending to the time-limited maintenance component cycles for the landing gear system as published by the Manufacturer in the P.O.H. has brought some pilots to grief.

So, if LGRMs are to be reduced, the question that needs to be addressed is: <u>What specific things</u> can we as pilots, through our own knowledge, actions and procedures, do to mitigate the risk of <u>Landing Gear Related Mishaps</u>? Consider these suggestions for your own flying:

#### Systems Knowledge, Maintenance & Pre-flight Inspection

Have a good understanding of how your landing gear system works, how it should be maintained and ensure that it be properly inspected prior to each flight. This knowledge is best backed up by checklists that are posted in sight in the cockpit or readily at hand.

During your next annual, when the aircraft is up on jacks, why not visit the shop and try to extend the emergency landing gear system yourself? Wouldn't it be good to have tried this prior to the first time you would need to do it in the event of a real gear failure. Have a checklist readily available in the cockpit to follow the correct procedure for the abnormal procedure of gear failure. Be able to correctly reach for your flap switch by touch and <u>with your eyes closed</u> so as not to confuse it with your gear handle/switch. In some aircraft flap and gear switches are close together and are easily confused.

Have a very clear understanding of how your gear-down visual confirmations work (eg. 3-green lights, pointer etc.) and what affects them. How does your installed gear warning horn operate? How and when does it sound and how does the aural warning compare to your stall horn? If you wear a noise-cancelling headset, make sure it plays through your headset, not just an overhead cabin speaker.

Know exactly what your landing gear deployment sounds and feels like in normal operation and what impact it has on your aircraft performance. <u>Use all your senses to assess this</u>. Does the gear <u>sound</u> normal as it extends? Approximately how long are the gear extension and retraction cycles? Was it normal on this extension? How does your aircraft <u>feel</u> when the gear is extended? You should <u>feel</u> a resistance due to more drag as the gear comes down. In most light, retractable aircraft, extending the gear causes a nose pitch down and a descent rate of about 500 fpm. Did that happen when you extended the gear? What normally happens to the overall aircraft performance when you extend the gear, and did those conditions happen this time when you extended your landing gear? If you aren't going down, you probably haven't extended the gear.

It is a good idea to pay attention to those manufacturer time-limit recommendations for the landing gear system. At minimum, when you near or reach those time-limits recommended by the manufacturer, ensure that you and your AME complete an in-depth examination of the gear system. You may elect not to make any change(s) after this inspection but at least you and your AME have had a good look and made that risk assessment. In view of the very high cost of repairs needed following a LGRM, skimping on landing gear maintenance is false economy and is not a good idea.

Finally, don't forget to have a good look at your landing gear on pre-flight inspections before each flight. Look especially for anything loose, leaking, cracked, or abnormal-looking and ensure wheel wells are clear of mud and other debris.

#### Manage Distractions

The key is to recognize that distractions are occurrences that have **<u>GREAT POTENTIAL to cause you to</u>** forget to lower the landing gear when one occurs. When one occurs, a warning bell should go off in your head to remind you that the situation is prone to result in a LGRM. Double-down, with extra vigilance and commitment, and be extra-sure that you do extend the landing gear. Of course, do what you can to mitigate distractions. One of these is to practice "sterile cockpit" protocol during the approach and landing procedures.

#### Go-Arounds, Continuous Circuits and Touch & Go's

On Go-Arounds and Continuous Circuits, be extra-vigilant to verify the gear has been successfully retracted on the climb-out and then successfully extended for the subsequent landing. Consider not doing Touch & Go's. This would go a long way to avoiding the risk of confusing the gear handle for the flap switch, and it will also reduce squat switch failure with the resultant gear collapse.

#### Multi-Crew/Instruction Flying

Delineate the individual duties and stick with them. Which pilot is going to lower the gear and who will verify it is down and locked? Be conscious of the potential for something to fall between the cracks and cross-check the other pilot aboard. Be especially watchful of the training situation cited earlier where a simulated gear emergency causes the gear circuit breaker not to be reset before the subsequent real landing.

#### Electrical Failure

In many instances it may be best to climb away and execute the emergency gear extension procedure to verify that the gear is down and locked prior to landing. Use a checklist when conducting this procedure and follow it, don't just go by memory.

#### **Illusions**

When winds are at or exceed 15 kts for landing remember the illusion risk referred to earlier and use extra vigilance to ensure your landing gear is actually down for landing.

#### Standard Operating Procedures – Establish and Follow Them For Every Landing

Employ standard operating procedures, including for gear extension, and follow them every time. If you do, unusual circumstances will readily jump out and alert you to situations that could potentially increase the risk of or cause a LGRM. That's your cue to heighten your vigilance and make particularly sure that the landing gear gets extended down and locked.

Use a written pre-landing checklist. Consider posting one somewhere in the cockpit so that it is easily within sight.

Have a standard point in the circuit or landing sequence where you always lower the gear. Various sources teach different places to do this. For example, the American Bonanza Safety Foundation teaches to always drop the gear when descending through 1,000' AGL regardless of whether this is in the circuit or simply on a final approach. ABS calls this the Gear Extension Altitude ("GEA"). ABS recommends that if the aircraft is not established in a stable approach, and the landing gear is not down by 500 feet AGL, a Go-Around should be executed. Whatever procedure you follow, it is recommended that you make it an ironclad habit to ALWAYS extend the landing gear at that point. Be consistent with this for every landing. You will be less likely to forget to lower the gear.

With another pilot or passenger aboard, ask them to let you know if they can see extended landing gear on their side.

As you activate your gear handle/switch to lower the gear, keep your hand on the gear handle/switch while using all your senses to verify that the gear is going down and reaches full extension. The last step is to visually check the gear down indication on the panel (eg. 3-Green). **Only then remove your** hand when this last visual confirmation step is complete. If you don't have all these confirmations, go around, climb away and troubleshoot.

Fly by the numbers. Power, Attitude and Configuration (Gear and Flap) = Known Performance. Know what the performance of your aircraft should be on final approach to land with the gear down. If you are not seeing the right performance (eg. descending), something is out of whack and maybe your gear is still in the wheel wells.

Do not extend full flaps setting until gear has been fully extended. Many pilots will select partial flaps before lowering the gear. If you normally use partial flaps early in the landing sequence, make it an ironclad habit to always extend the gear before extending flaps to their full down position.

<u>Very importantly, have a pre-landing GUMP-like mantra (Gas, Undercarriage, Mixture, Propeller)</u> that you use and say it out loud **at least three times on final approach.** <u>Don't just say the mantra in</u> <u>a rote-like fashion. As you are saying each element LOOK at the item being referred to and make</u> <u>sure the indication is correct before moving on to the next one</u>.

Some pilots augment their GUMP check mantra by verbalizing out loud, another short phrase on very short final as a last check that the gear is down such as: "Across the fence and gear down," or something along those lines. The point is to make this a habit that you **routinely use on each and every landing.** If you find the gear is not down... Go Around!

When you do land, protect the nosewheel by landing first on the main wheels and holding off the nose wheel as airspeed bleeds off. This lets the mains take most of the impact and weight, and helps the squat switches to perform their function of preventing gear retraction and avoiding a gear collapse.

Once you have landed on the runway and are rolling out, do not make any configuration changes until safely off the runway and stopped on the taxiway. Don't attempt to raise flaps on the runway. This takes away the risk of confusing the flap and gear switches.

#### "THERE ARE THOSE WHO HAVE AND THOSE WHO WILL...NOT!"

It is certainly **NOT** inevitable that every retractable aircraft pilot will eventually have a LGRM. Following the procedures above will help mitigate gear-up landings or gear collapses. Commit to **NOT** being one of those retractable pilots "who have or will."

May all of your pre-landing checks indicate: "Three Green, Good to Land."

#### Banner Towing Service at KW!

Shan Gnana at FliteLine (KW Airport) provides banner towing and can supply a good addition for advertising for a company or social/personal event. He can also provide special messages (you missed a birthday or anniversary, or need spousal OK to buy a plane....). Shan's contact information is:

Shan Gnana 519-514-0530 (Ext 510) charters@fliteline.ca

### Pushing Myself - Getting the Night Rating!! (Geoff Gartshore)

It actually started with just a desire to add a few hours of instrument (under the hood) time to my logbook. I wanted to enhance my instrument scan, increase my trust in the instruments themselves, and practice getting out of unusual attitudes as well.

My friend and instructor (CFI 2) was flying cargo out of Hamilton (now a Boeing 737 Max pilot), and kindly offered to provide me some instruction in my aircraft (Zenith CH200). This was in March 2022.

We did a few lessons together (Exercise 24 - Instrument training), and things seemed to be gelling and going well.

Once we completed the Under the Hood work, my instructor pointed out that "You know, you now have the required instrument time for the night rating". We would just have to add some dual night time, a dual night cross-country, and some solo night time (me) to complete the rating.

While I was mulling this over, a few events and issues put a hold on things. Firstly, my vacuumdriven attitude indicator failed during one of our flights. Secondly, I was currently on hold with my medical waiting on Transport Canada to review some material (covered in a previous Newsletter!). This prevented my from doing any solo flying as part of the training. Thirdly, my instructor friend was increasingly busy flying cargo and undergoing captain upgrade training through the fall of 2022, so our training really slowed down. However, by mid January 2023, and with a deadline looming for my friend to re-locate to Calgary for 737 Max training, we re-instated the night rating training in earnest.

Part of night training is ensuring that cockpit lighting is adequate and suitable (ideally low light and red), and that one has access to emergency lighting and batteries if aircraft power is lost during flight.

To that end, I prepared small labelled plastic bags with spare batteries for my headset, small additional flashlight, CO detector, and SPOT 3 tracker (see photo) which I carry for easy access. I also wear a headlamp around my neck which has red, green and white light options.



I also installed a new dimmer switch for my existing red LED panel light strip. The new dimmer enables me to lower the red light intensity to minimal, or whatever setting provides optimal night lighting (see photos). This system works well.



Dimmer Lights Full Bright





First Night Taxiing on Alpha for Runway 26!

We completed the dual night flying, focussing on circuits and emergency procedures (including an unexpected power to idle during the initial night climb-out from runway 26 at KW). We successfully navigated that training, by the end of January 2023, around the time my friend headed to Calgary.

I was able to complete the dual night cross-country on Feb 6, 2023 with another instructor (Dave Kirby, based at Stratford, who is a great guy and has trained other members of our COPA group in the past). Dave prefers training pilots in their own aircraft. He really quizzed me on emergency procedures during that night flight, which departed KW, did some low inspection passes and circuits at Hanover, continued to Wiarton for more of the same, and then returned to KW (Total Flight time 2.9 hr). Ironically, during the return from Wiarton, we experienced a total vacuum pump failure (for real). Dave used it to quiz me further on emergency procedures. I must have done OK because he provided a very positive entry about my performance and knowledge of my aircraft and systems when he signed my logbook.

My Calgary instructor friend continued to oversee the final portion of my training as I completed the night solo flight component. This ranged from initial circuits at KW, to solo flights to Brantford and then Stratford for more training circuits, using the ARCAL lighting, etc. At Brantford, one pilot in the circuit had the airport lights go off on short final, and to his credit did an immediate go-around. I was able to get the lights back on in the downwind, and this was a good reminder to re-set the lights as part of the downwind check.





Departing KW Runway 32 for Brantford Night Circuits



Right Base Runway 26 KW (digital speed is ground speed)



Short Final Runway 26 KW

May-June 2023 Newsletter

Carrying this lesson with me during a subsequent flight to Stratford (my final solo night flight for the rating), I triumphantly keyed the mike the required 7 times while in the downwind at Stratford - and promptly **TURNED OFF ALL THE LIGHTS**..... Yikes....!!!! Playing it real cool, I then proceeded to press my mike button like a machine gun, and managed to get the lights back on. No problemo, I then proceeded to make a good touch and go on Runway 05 and rose triumphantly into the air for a few more circuits and then a return to KW.

On March 29, 2023, I filed my paperwork with Steve Johns at the Flight Centre, and received my temporary Night Rating endorsement in my licence book (see photo).

PLACE NEXT LICENCE	PERMIT LABEL HERE
The holder of this document is authorized to exercise the privileges endorsed to the right for 90 days following the date of this certification:	NIGHT
te titulaire du présent document est autorisé à exercer les avantages annotés d'-contre pendant une période de 90 jours suivant la date de la présente attestation de compétence :	RATING
Authorized Person's Name/Nom de l'agentie) autoriséle) : STENE DOHNS	
Licence Number/ Numéro de licence : AA812135	Certification Date/Date de l'attestation de compétence : 2093-03-99 cg/tex : 2015 AUL 31
	ANTE DE LICENCE/PERMIS ICI
The holder of this document is authorized to exercise the privileges endorsed to the right for 90 days following the date of this certification:	A REAL PROPERTY AND A REAL
Le titulaire du présent document est autorisé à exercer les avantages annotés G-contre pendant une période de 90 jours suivant la date de la présente attestation de compétence ;	

Overall, I would say this was a very rewarding experience, starting off with just some instrument training and unexpectedly evolving into completing the Night Rating. So far I have found the night flying experience to be marvellous, and my wife has even commented she would like to go on a future night flight.

I recognize that night flying does bring some inherent risks, and requires diligent planning and execution. I also recognize it is not a reason to attempt a return flight at night if conditions are not suitable. But it does provide options during suitable weather for extending a visit somewhere (delaying a return), with the added benefit of seeing the countryside in a whole new (lack of) light......

# MEMBERS' CORNER

## First flight into Oshkosh! (Hella Comat)

"White and red RV short final, green dot, cleared to land." These were the legendary words I'd been anticipating for months as we'd planned our trip to EAA AirVenture. More commonly known as simply 'Oshkosh', this fly in occurs every July in Wisconsin and it attracted 650 000 international visitors in 2022. About 10 000 airplanes flew into the field, with the busiest times seeing aircraft land every 10 to 15 seconds. The need to be well prepared for the arrival is an understatement of epic proportions. So I started early.

#### Plan, then Plan Some More

In August 2021 my husband Bill booked our accommodations. You can camp, find a motel, or even rent a home, but our favourite is to stay at the budget level University of Wisconsin dorms located in downtown Oshkosh. We love the convenience of regular, dedicated bus transportation to and from the university right to the centre of the Oshkosh exhibit grounds. Sure, the rooms are spartan (pssst: with the overwhelming number of men attendees at OSH, the common women's shower/ washrooms are usually completely deserted) but the price is right and everyone there has the same passion, and unlimited desire, to talk aviation. Sounds like heaven, right?

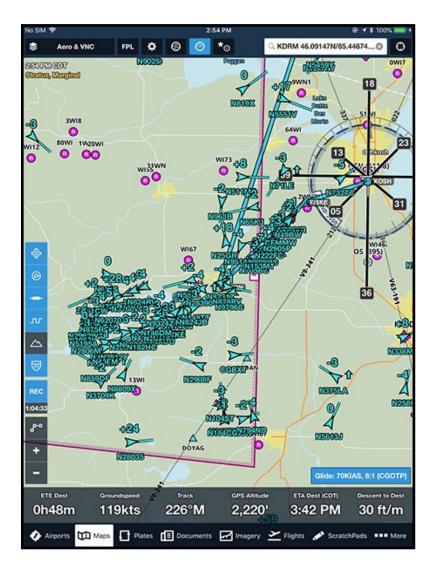
Next was planning the trip. I'd been to AirVenture a number of times, sometimes driving (ugh - 12 to 14 hours from the GTA depending on when you transit Chicago) and sometimes flying in but landing at Appleton airport ATW just north of Oshkosh. Yes, on those trips we wimped out by not landing at OSH, but we tried to justify it by insisting that we were avoiding the worst of the air traffic.



Gas stop at Bult Field (C56) Illinois

#### **OSH VFR Approach Procedures**

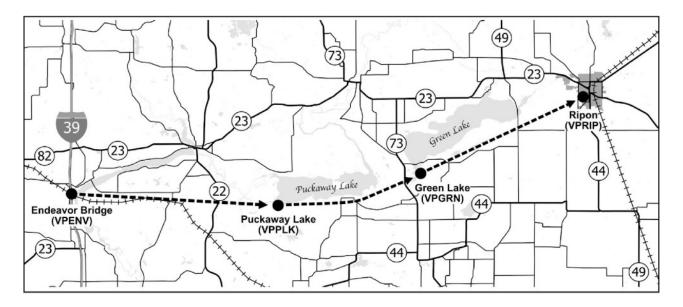
Disclaimer alert: The following is just a summary of my experience flying in, and a first timer at that! If you plan to go to OSH, check out the Oshkosh Notice (link: <u>https://www.eaa.org/-/media/files/</u><u>airventure/flyingin/notam/2022/2022-faa-notice-airventure-flight-procedures-notam.ashx</u>) (a whopping 30 pages last year but then that includes IFR, the seaplane base, and more) that is published every year online, talk to experienced pilots who have flown in, and then just do it!



Traffic flying into OSH is BUSY so best to be well prepared!

The brilliant planners at EAA adjust the procedures, as it seems to get busier but yet more streamlined every year.

First, flying in VFR from any direction, you need to monitor the Arrival ATIS about 60 miles out. It will tell you which transition starting point is in use. Depending on traffic density it could be one of 3 VFR waypoints: Green Lake is closest for low traffic times, or Puckaway Lake, or Endeavour Bridge, which is the furthest away to the west. On our arrival, it was Puckaway Lake, and as we got close our eyes were peeled looking for the inevitable traffic. Aha! Ahead we saw a high wing and I tucked in behind trying to stay within the ¼ to ½ mile separation limit. Speed must be 90 knots; altitude 1800 feet, lights on, single file traffic only. (Faster aircraft fly 500 feet above.)



### ATIS identifies which of the 3 reporting points is being used. Source : <u>https://www.eaa.org/-/media/files/airventure/flyingin/notam/2022/2022-faa-notice-airventure-flight-procedures-notam.ashx</u>

#### Fisk Approach

The next waypoint is the town of Ripon. We had to tune in to Fisk Arrival, which is the first time you hear a live voice. At Fisk, temporary air traffic controllers are set up on a hill with a small trailer, lawn chairs, binoculars, and incredible patience. Listening, (because that is all you are allowed to do until you shut down all the moving parts of your parked airplane at OSH) we realized how unbelievably busy the area was. The controller was speaking at auctioneer speed issuing directives, letting pilots know which way to go, and asking for confirmation with a wing rock. And they weren't taking any nonsense! We heard, often, the penalty for flying too close to other aircraft or not following the precise route ("If you can see the railway tracks to your left or right, you're NOT on them!") - you're sent 'to detention' out of the conga line to circle all the way around Green Lake and get your act together before trying again.

To make matters even more congested, we then heard that one of the two runways at OSH was closed to VFR traffic as either a group arrival, a VIP, or some showplanes were on approach. So it was a relief to hear: "Red and white taildragger, rock your wings. Good rock. Follow the traffic ahead for right downwind Runway 27."

#### Oshkosh Landing

Immediately, we switched to the tower frequency for Runway 27 - there are separate frequencies for the two runways. I was 110% focused and working hard to maintain the correct separation from the aircraft ahead, stay in line, and hold the altitude accurately. This controller was also doing a non-stop, rapid-fire monologue directing traffic, landings, and reminding everyone to hurry up - this is not your sleepy home airport! The procedure for Runway 27 requires a tight right base turn abeam the numbers. Then there are three dots along the runway: orange near the threshold, green 1500 feet further down, and white another 1500 feet. I saw and heard a DC 3/C 47 on final. The controller managed to land the small aircraft ahead of me on the white dot, then me right after on the green, and the big taildragger behind me on the orange! Whew!

No time to take a breath now though. The controller instructed me to immediately depart the runway. No sauntering along to the next paved turnoff at OSH! I veered off onto the grass at a faster speed than I would have preferred, but with the big guy somewhere on my '6', it seemed the wiser route to go. To look at the bright side, getting direct ATC instructions and not having to respond, other than to follow instructions *immediately*, is a relief.

#### **OSH Volunteers are Rock Stars**

Then the magic continues. EAA Airventure runs so well due to thousands of volunteers. Actually it probably wouldn't work at all without them. As I was speeding across the grass somewhat in control, a red vested volunteer waved at me to head left. We had prepared the required sign and Bill was holding it up in the windshield, indicating the letters for Homebuilt Parking. Other sign/parking options are for Camping, General Aviation, Vintage, and more.

At each turn, successive volunteers sent us through a dizzying maze of airplanes, people, and taxiways to a final parking spot, also accurately flagged and directed by yet another volunteer.

Kissing the ground was my first instinct after shutting down, but then I didn't want it to be obvious that I was a first-timer. Volunteers and other pilots arriving to the right and left of us were super friendly and welcoming. I took the necessary arrival selfie, then got to the task of unpacking and tying down. Our sense of accomplishment was probably excessive for what we'd just done, but it felt awesome nevertheless!





Jumping out to selfie our first successful OSH landing!



With so many priceless, irreplaceable airplanes at OSH, 3 contact multi-point tie-down systems are preferred!

#### EAA Airventure Highlights

Our next four days were super. Some high points were:

- Daily afternoon airshows (can it get any better?) and a breathtaking night show
- Walking through endless rows of spectacular aircraft: vintage, homebuilt, warbirds, ultralights and so much more
- Getting reacquainted with members of Ladies Love Taildraggers, an informal group with which I've travelled
- Listening to Theatre in the Woods presentations by astronaut Eileen Collins and by Women Legends of Aerobatics
- Going to seminars on every topic you'd ever want Bill and I had to split up to listen to the ones we didn't want to miss and then share what we'd learned with each other afterward
- Shopping for any aviation related article you can think of, and then some

Ah, the list goes on. Every time we'd sit down for a rest or snack, the strangers beside us would strike up an aviation related conversation and chat like old friends. It's the ultimate hangar flying experience.



Women Legends of Aerobatics Presentation





Every day at OSH is an airshow!



There are even spectacular night airshows!

Then, my luck continued – on the way home we stopped overnight to visit a pilot friend in Toledo. He is a Ford Trimotor pilot and AME and had generously ferried my RV-6 from its previous home in New Mexico to YKF, during COVID in 2020! He gave me a ride in a T-6 and let me fly it for a bit!



My lucky day - I scored a ride in a T6 at Toledo Executive (TDZ) on the way home!

Like any aviation adventure, prepare by completing the due diligence of homework and planning, and then soak up the amazing rewards!



# (July-August Issue - Weather and Simulated Engine Failure!)