

# CORBEN COURIER

## Chapter Meeting April 21 at the Fitchburg Library



Our April meeting is scheduled for Thursday, April 21 at 6:30 PM. The featured topic is the History of Drones. Our speaker is Jim O'Connor. Jim O'Connor grew up in Casper, Wyoming flying model airplanes and always wanting to be a pilot. He graduated from Natrona High School and moved on to college, finishing with a mechanical engineering degree from Marquette University in Milwaukee, WI.

Chrysler automotive engineering in Highland Park, Michigan was the next stop. However, Uncle Sam had other plans for his next two years.

Returning to Michigan and Chrysler he exchanged his GI Bill for private pilot and commercial ratings, flying when he could and enjoying the Michigan countryside from the air.

Subsequently he moved to the automotive supply side of the business where he worked for The Budd Company as a chassis structures engineer for the next 25 years.

Incidentally, The Budd Company made the only stainless steel cargo plane ever built, the RB-1/Conestoga for the US Navy and US Army. Only seventeen were built before WWII ended. A group of pilots bought several and started Flying Tiger Airline with them but as soon as possible moved to other aircraft since the Conestoga was considered a "real dog."

Jim finished the last 12 years of his automotive engineering career with Magna, a Canadian global automotive supplier.

He and his wife Lucille moved to Fond du Lac, WI when he retired from work in 2010 and is now an active member of EAA Chapter 572, serving as a Board member and Program Co-Chair.

Jim has introduced his History of Drones presentation to several EAA Chapters. It is an interesting and informative presentation. You may learn some things you did not know, and Jim will also comment on the current UAV regulations and future Drone technology. Should be very interesting! See you there.

- Dean Zakos

## Flying Fun with Don Goetz



The date was November 30, 2002. It was a cold, dreary morning at Tacoma Narrows airport, just outside of Seattle, Washington. I was in the right seat of a Lancair 320 that Don Goetz, my test pilot, and I were ferrying back to Chicago from its unfortunate gear up landing in Sedona, Arizona. Knowing I would soon need training in my own Lancair Don thought this would be a great way for me to get some stick time in a Lancair. He invited me to join him on the flight from Arizona to Chicago. At this point you are probably wondering what in the world we were doing in Seattle when we were

ferrying the plane to Chicago. I was wondering that very same thing after we departed Sedona when I noticed a northwest heading on the compass instead of a northeast heading. "I need a neck adjustment from my chiropractor in Seattle" was Don's reply to my inquiry on navigation. Oh, now it all made sense. Don is always full of surprises. You never know where he is coming from or where you are going with Don but hanging out with him is always fun and exciting.

Back to Tacoma Narrows airport. First and foremost on my mind was how in the world we were going to depart VFR for our long flight over the mountains with ceilings and visibility at bare minimums. Don doesn't clutter his mind with such trivialities. The engine is now running and rain is flowing off the canopy in beaded lines. "See that hole out there off our nose?" Don asked. Straining to see anything through the rain speckled canopy I finally spot the tiny opening in the overcast cloud layer Don was referring to. "Aim for that" was my instruction from Don. Cleared for take-off, I advanced the throttle and took a few deep breaths. I flew us out to Don's tiny little sucker hole in the sky and began circling our way up into it. "Tighter, tighter!" came Don's commands in my headset as the bank angle I was flying was not going to keep us out of the clouds. Tighter and tighter we turned, higher and higher we climbed. "Where is the top of this overcast?" I kept thinking to myself, hoping to finally be able to level out our little bird on top.



Our surroundings finally started to brighten. Wisps of clouds darted past and before long, to my great relief, we were cruising along on top of a total overcast cloud layer, our hole in the clouds closing up behind us just as we exited it. Now we were treated to bright sunshine as we made our way across the beautiful floor of bright puffy clouds. Mountain peaks from the Cascade Range rising up through the overcast added to the majestic view out of our canopy. "Does it get any better than this?" I said to myself, having never experienced such a beautiful sight from the cockpit of a small aircraft.

A half hour into our flight all this “giddy, pinch me, is this real” stuff came to an abrupt halt. “Ew, that’s not good” came over my headset from Don. Those remarks, coming from a guy with 26 dead stick landings, 6 blown engines and 5 helicopter crash survivals in Vietnam, are not what you want to hear while flying 1,000 feet over a total overcast in the Cascade Mountains. “What’s not good, Don?” I asked, fearing his reply before he opened his mouth. “Look at our header tank fuel supply” he said, pointing to the gauge. Fuel is pumped from the wing tanks on Lancair aircraft via electric transfer pumps to a header tank where it is then fed to the engine via gravity. This fuel transfer procedure is done every so often to keep the header tank with an adequate fuel quantity. The fuel transfer process on this particular aircraft we were flying was automated through a clever system involving floats and relay switches in the header tank. The automated system works great, providing it is turned on. Unfortunately Don missed that item on the preflight checklist (for good reason - can you guess why?) and we were now staring at the fuel gage indicating 2 gallons remaining. Back went the throttle, on went the fuel transfer pumps as our eyes remained glued to the fuel gauge. After what seemed like an eternity the number 3 appeared on the gauge. Wow, was I happy to see that. Frantically pumping fuel and trying to restart the engine while descending into an overcast cloud layer in the mountains is not a place anyone wants to be.

Don is the highest time Lancair pilot in the world and one of the best stick and rudder pilots anyone could ever fly with. People who know Don well will say that when the doo-doo hits the fan and all bets are off, Don is the one you want in the left seat. These same people will also say, however, that having Don in the left seat bumps up the odds that the dreaded doo-doo event will happen in the first place. Say what they will, I’m sticking with Don every time. He has gotten himself out of more hair raising, white knuckle incidents than you can imagine.

One thing I enjoy about Don is his blunt, cut to the chase style of communication, especially when it pertains to his duties as a company test pilot. Don traveled all over the world performing first flights on a wide variety of customer built Lancair aircraft. “Well what do you think of her?” the anxious builder asked Don after he wrapped up his detailed inspection and climbed out from under the plane. “Do you own a chainsaw?” Don asked. Puzzled over such a question, the owner asked why Don wanted a chainsaw. “Because I’m going to cut the plane in half so you don’t kill yourself; this is a real piece of s&\*t” Don asserted. Enraged, the owner told Don he already had an FAA sign off. “Oh, I’ll take care of that the minute I leave here. I’ll have the FAA rescind that in short order” was Don’s reply. “Here, look at this” Don said as he rapped on one of the rear windows, knocking it loose from the fuselage and flinging it into the baggage area. The builder had not removed the peel ply, a mold release material, prior to bonding the various components of the plane, creating a serious safety issue. Without a strong fiberglass to fiberglass bond the plane would surely come apart in the slightest



turbulence. Another builder once asked Don prior to his arrival if Don wanted to observe a gear retraction test while Don was performing his inspection. “No need for that” was Don’s reply. “They land just fine gear up, doesn’t bother me”. The owner burned up his hydraulic power pack for the landing gear assembly with all of his test cycles before Don’s arrival!

Yes, Don Goetz is quite a character. I count myself fortunate to have him as my close friend for the last 30 years and I look forward to many more fun times ahead.

We are just about ready to begin another fun flying season. Let the fly-ins, fly-outs, Young Eagle events and other aviation fun begin! See you at one of these events soon. Fly safe!

- Rob Tweed

## Ultralight Flying

Everyone who has an interest in flying has their dream airplane. If money was no object, I’m sure that we would all open the hangar door to expose that shiny, fully restored P-51 or the brand new Carbon Cub (ok those are two of mine). Money seems to be the limiting factor in all fun things we want to do. I have started flight training a number of times, only to run out of money due to life’s little surprises.

But I still wanted to fly, so for me, the economical option was an ultralight. Under FAR rules, you do not need a pilot’s license to fly an ultralight. I have over 35 hours of flight training and ten-plus solo hours in a 152, so it’s not like I just jumped in with no training at all. Even with the training I had, it took me almost a year before my first flight.



My ultralight is a Hipps J3 Kitten. While not a Cirrus or a shiny 172, it does help me scratch my flying itch. It is wonderful to float along at 200 to 500 feet and view the countryside during the early morning or just before sunset.



*Sunset over Cottage Grove*

Here is a video of one of my early morning flights:

<https://www.youtube.com/watch?v=EcMsRx2jhFM>

So for anyone looking for a way to realize their dream of flying, take a look at the ultralight option. While I know it isn't as glamorous as some of the other planes on the ramp, at about \$6/hour to fly, it sure is a great option for the bank account.

*- Brian Terry*

## Heavy Bomber Weekend News

The P-51 Mustang "Gunfighter" is confirmed for Heavy Bombers Weekend 2016! Gunfighter will be offering Air-Rides all weekend. Here is your chance to check off that Bucket List item you've always dreamed about. Reservations in advance will offer a nice discount. The air-ride link will be available soon; we will post an update when it is in place.

[www.heavybombersweekend.splashthat.com](http://www.heavybombersweekend.splashthat.com)

I was able to coordinate an agreement between Janesville's Air Traffic Control Tower Manager, Rockford Approach Control, and "Bonanzas to Oshkosh" - all in agreement to allow the mass fly-out of 100 Beech Bonanzas to fly directly over Janesville in formation on Saturday July 23, at High-Noon. Everyone seemed pretty excited and 'chipper' about doing this, so it fell into agreement pretty easily. The EAA and CAF flight crews are being notified as well, of course, so they can plan accordingly. I have their support as well. This will be promoted in social media and the HBW website. The sound of 100 Bonanzas will be pretty sweet!

The new HBW 2016 Promo Video is on YouTube. Enjoy!

<https://www.youtube.com/watch?v=WLt580eai-U>

- Pete Buffington

## Membership Directory and Database

Since taking over the membership role on the board, I have been unable to find a list or information on the members of the chapter. Also, in talking with a few of the members, a member directory sounded like a good idea.

To that end, I have created a members' database that I would like to use to organize all of the membership data. This would be used for tracking dues, mailing lists and creating a members' directory for the group.

Over the next month, I would like each member to fill out the membership application and send it to me. You should find a copy of the application attached to the newsletter email this month. It can also be found on the chapter website. Please fill out any information that you would be willing to share with the group. In addition, if you would like your information excluded from the directory, please send me an email or contact me and I will make sure that it is not published. This directory will only be supplied to other members of the chapter and will not be shared or used for any other use.

My goal is to have the directory available by June and I will publish an update at the beginning of every year. Please contact me directly if you have any questions or concerns.

- Brian Terry

# Second Fly-Out on May 1

Experimental Aircraft Association  
Chapter 22  
Rockford, IL

**Fly-In / Drive-In Breakfast**

**SUNDAY, MAY 1<sup>ST</sup> 2016**

**7:00am – 11:00am**

Menu: pancakes, eggs, sausage,  
coffee, milk, juice

**EAA CHAPTER HANGAR  
COTTONWOOD AIRPORT 1C8  
5105 AUBURN ROAD • ROCKFORD • IL**

**Adults : \$7.00**  
**Children (under 12): \$3.00**

[www.eaa22.org](http://www.eaa22.org) Facebook

Based @ 1C8 Cottonwood Airport

For more information, please see

<https://www.facebook.com/events/1099900916707596/>

- Pete Buffington

## Calendar

Thursday, April 21, 2016, 6:30 p.m.  
Chapter Meeting at the Fitchburg Library

Sunday, May 1, 2016, 7:00 a.m. to 11:00  
a.m., Fly-Out to Pancake Breakfast at  
Cottonwood Airport, Rockford, Illinois

Thursday, May 19, 2016, 6:30 p.m. Chapter  
Meeting at the Fitchburg Library

Friday, July 22 to Sunday, July 24, 2016  
Heavy Bomber Weekend, Southern  
Wisconsin Regional Airport, Janesville

July 25–31, 2016 – EAA AirVenture  
Oshkosh 2016

Sunday, October 2, 2016, 1:00 p.m. to 4:00  
p.m., Chapter 93 Banquet at Rex’s  
Innkeeper, Waunakee

- Al Kurth

## Handling In-Flight Emergencies – Engine Out

*By Dean Zakos*

For pilots the most dreaded in-flight emergency, with the possible exception of an in-flight fire, is the engine out. When the engine quits (assuming a single engine) your aircraft is going to come down. Where your aircraft comes down, and the chances of walking away, depend mostly on your immediate actions.

The seriousness of this situation has been recently brought to our attention by Brian Terry, a Chapter 93 Board member, who shared a video posted by a member of Brian's EAA Ultralight Chapter 1. You can find the video here: <https://www.youtube.com/watch?v=L0drAzJNY28>

As student pilots we practiced engine out procedures. These procedures should also be part of the periodic flight reviews we do with a qualified instructor. Let's take a few moments and review these procedures. Your life and the lives of others could depend on knowing these simple rules.

1. ***Listen – Really Listen - to Your Engine.*** Most often engines don't quit without some prior notice. If you are familiar with your engine when it is running well, you should be attuned to any perceptible change in sound or vibration. If you hear something unusual or feel something unusual, your engine is likely telling you something and it is important to act on that information. It may be on run up or it may be in cruise but follow your intuition. If it does not feel right or sound right, don't take off, or if in cruise flight, immediately start looking for the cause (engine rpms, fuel quantity, fuel pressure, oil temp, oil pressure, mixture, etc.), and suitable places to come down.
2. ***Know the Wind Direction.*** When flying, know the direction of the wind at all times. Why is this important? You always want to land at the slowest speed possible. Landing into the wind gives you the best opportunity to accomplish this. The more speed you carry into the landing, the more kinetic energy you have to dissipate. Impact forces increase and decrease exponentially with increases or decreases in your speed.
3. ***Pitch Down and Maintain Best Glide Speed.*** You only have a few moments to react. It is important to know the best glide speed for your aircraft weight and configuration in advance. You need to immediately pitch down. Once that speed is reached try to maintain it. You may want to consider setting a speed "bug" on your airspeed indicator at best glide speed as an easy visual reference. If you don't have a speed bug, before your next flight, place a sliver of colored tape or a grease pencil mark at that point on your airspeed indicator. It may come in handy. If your aircraft engine quits at altitude, you have more options. If you are only at 1000' AGL, you will have fewer options. Knowing the glide ratio of your aircraft may be useful. The single engine Pipers and Cessnas usually have about a 9:1 glide ratio. At 1000' AGL, that should give you about a 9000' glide range, or about 1.7 miles. Of course, maneuvering the aircraft and headwinds can have an effect on glide range. Whether your propeller has stopped completely or is windmilling also plays a role. Don't push on to your max glide range unless you have no other choice.



4. ***Pick Your Landing Spot.*** Often a suitable landing spot is passed up in hopes of finding a better spot. Resist this urge. Unless you have altitude, your focus should be on a landing area either directly below you or not much further out than your aircraft's wingspan. If you have a GPS and time, hit the "NRST" button as there may be an airport or landing strip within your gliding range. Remember, the sooner and higher you can arrive over your landing spot, the better chance you have to make a good power-off landing. You want to plan your glide to arrive over your landing spot with enough altitude that allows you to fly some or all of a relatively normal landing pattern. Flying in the Midwest, fields are often the best alternative. The best fields are, naturally, the smoothest. Use the sight picture from the countless downwind legs you have flown at your own airport to estimate the length of the field you will need. Keep in mind your aircraft rollout will be much shorter so you will not need as much distance as on a paved runway. Try to locate a field without too many rocks, ditches or gulleys. Try to land with furrows or crop rows rather than across them. Look for obstacles such as power lines, trees and fences, or hedgerows. Assume every field's boundaries contain fences or power lines. Roads or highways are an option, but not necessarily the best option due to power lines, telephone poles and wires, road signs, vehicles, and pedestrians.
5. ***Set Up Your Landing Pattern.*** It is almost impossible to shoot a successful straight-in approach during a forced landing. As you are gliding toward your landing spot, you should attempt to visualize the entry and the leg(s) you will be able to fly. Try to fly a normal pattern if you can, but recognize that you may only be able to fly a base leg and a final approach. Keep your legs tighter and closer to the field as your descent rate will be higher than normal. Note that you should not use the runway threshold as the aiming point as in a normal, power-on landing, but instead use an aiming point about a third of the way down the field as your touchdown point. This will help make sure your base and final legs will be tighter and you will not wind up short of your chosen field. The more familiar you can make the legs appear to you the more normal the landing should be. If you can't fly a base leg, then start your turn abeam the touchdown point and fly a gliding turn into your final approach. Better to come in a little high than a little low. You can always S-turn or slip on final to lose altitude – you will not be able to climb if you undershoot. Remember – never attempt to stretch the glide. You could stall the airplane. Try to make all turns at about the standard rate. Steep turns so close to the ground are a bad idea.
6. ***Fly Your Final Approach.*** Your glide angle will be steeper than a normal landing approach. Look at your aiming point. That is the point at which you will want to begin your flair. As the glide continues, watch how the aiming point moves. If the aiming point quickly moves up the windshield toward the top of the cockpit you are not going to make it. If the aiming point moves down the windshield, you will overshoot unless you lose some altitude. If you can keep the aiming point centered while gliding toward it, you have it made. Plan to land as slowly as possible, stalling the airplane as close to the ground as you can. Remember, you want to touch down at the slowest speed possible. As Bob Hoover, acknowledged to be one of the best pilots in the world, says in "*Forever Flying*" - continue to fly the airplane through the landing and rollout even if the aircraft is starting to come apart around you, as you still may be able to avoid large solid objects such as big trees, stone walls or structures.

7. ***Do the Last Things Last.*** Your only priorities are “Aviate, Navigate and Communicate.” I suggest you don’t even think about using the radio unless you have altitude and substantial gliding range. Calling “Mayday” when you only have two or three minutes before you come down is not the best use of your time, which at the point when your engine quits, is now very precious to you. Tuning and talking on the radio is a distraction, and ATC or anyone else who can hear you can’t provide much assistance in such a limited period of time. If you do have altitude and gliding range, then tune your Comm to 121.5 and your transponder to 7700 and announce who you are, where you are, and the nature of your emergency. Same thing with troubleshooting the engine failure. Only if and when you have time. When you know you have the landing spot made, only then should you think about making sure your seat belt is tight, loose heavy objects are stowed, and a door is cracked open to prevent jamming in the event of the door frame deforming in a hard landing.

Why are videos and articles in the flying magazines such as “*I Learned about Flying from That*” so popular? Because we can all learn something from the experiences of our fellow pilots. The odds are most of us will never experience an actual engine out emergency but if we do we want to be prepared, proficient, and confident. Videos and articles are great teaching tools. However, the best teaching experience is getting out in your own aircraft and practicing engine out procedures. Even better – consider getting a glider rating – glider pilots fly engine out all the time.

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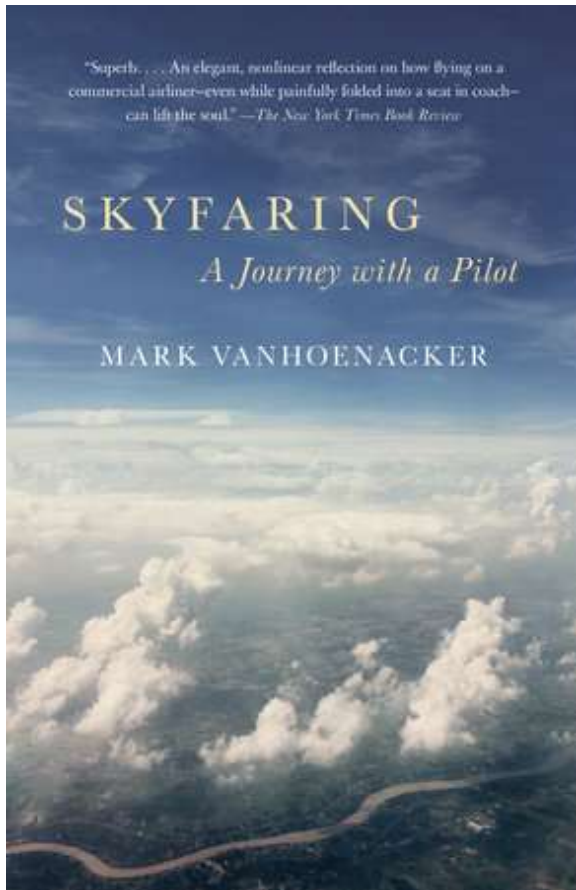
# Thank You

Thanks to Rob Tweed, Fred Leidel, Dean Zakos, Pete Buffington, Brian Terry, and Jeff and Patty Plantz for contributing to this month's newsletter. Please send articles for future newsletters to [a.kurth@sbcglobal.net](mailto:a.kurth@sbcglobal.net).

- Al Kurth

## Book Review

by Fred Leidel



“Skyfaring – A Journey With a Pilot” by Mark Vanhoenacker, 342 p. hardbound, 2015, published by Knopf Division of Penguin Random House.

The author is a newspaper columnist and pilot who began his flight training in Britain in 2001 and began his career in the airlines in 2003, and now flies the 300 passenger, multi-decked Boeing 747 (which he calls today's DC-3 from London to all of the major cities of the world.

He describes in detail the duties of the pilots and crew, the differences in the length of the day between flying east and flying west. While English is the language for pilots throughout the world, some strange interpretations occur by some whose native language is not English.

Topics covered in the book are given in the chapter titles: Lift; Place; Wayfaring; Machine; Air; Water; Encounters; Night; Return. These things are explained as how they affect the pilots, the crew, the passengers, and the ground observers, and sometimes even the families of the pilots and crew.

It was a very good fascinating book to read. It was a Christmas gift from my son, Jim. He wants to read it next.

Here are photos from some of our own sky farers, Jeff and Patty Plantz, taken on their way to SUN 'n FUN. Jeff calls the photo on the left "tight rope walking" by Lake Barkley, Kentucky. The photo on the right is of St. Louis along the Mississippi River.

