

YALE AVIATION NEWSLETTER

December 2017

UPCOMING EVENTS –

- **YA VMC Club** – **Jill Levine** has finished with her training for this EAA-sponsored club where VFR scenarios are discussed. More information coming soon.

PILOTS...

Charlie Skelton wants to be sure members know that he got behind in billing his CFI time once he started teaching again. Some of you may be just getting bills that are for flights 5-6 months ago. Charlie apologies for this inconvenience!



The **Annual Meeting & Badge Renewal** took place Thursday, Dec 7 at West Ramp. Thanks go to **Kathy Grant** and her team for processing almost 2 dozen badges! Thanks also to our President **Jake White** for yummy food that was NOT pizza!! Below are the Board of Directors plus the officers for 2018:

Jake White - President

John DeCarlo – Vice President

Laura Baldwin – Secretary & TSA

Charlie Skelton – Treasurer & Chief Pilot

David Mikhail

Alark Saxena – Yale affiliate

Clarice Begemann – past president

Those of you who've accumulated more hours than you might likely fly please consider donating to the club – it is tax deductible!! **Help keep Yale Aviation alive in the future as it was for you!**

... & PLANES

Winter Flying: Winter is here! Frost, snow, ice and freezing rain. When you schedule the aircraft, more than likely it will need to be deiced (frost or freezing rain) and pre-heated.

Pre-heating is a must when temperatures have been below 20 degrees at any time during the preceding 9-12 hours! *One way to check if preheating is needed is by checking cylinder head temperature (CHT) during preflight.* It should be at LEAST 30°F. Remember that NO ONE should be inside the airplane when it is being preheated. Check out the CO monitor – it will go black!

Light de-icing takes place outside: 15 minutes with the tail of the airplane into the sun, followed by 5-10 minutes with the front of the wings into the sun should do the trick. Excessive melted water can be wiped off the wings, but it is best to just let water blow off once the aircraft is in the air. **NEVER scrape frost off the windshield**, or the wings for that matter – there is dirt in that frozen water, and it will cloud the Plexiglas & scrape the paint. If there is heavy frost, de-icing will require the hangar for a meltdown. **TO HANGAR THE AIRPLANES**, or for any pre-heating questions, contact our chief pilot, **Charlie Skelton** (203-640-3580). And be sure to tip those line guys a few dollars if they are preheating out in the cold for you for 20 minutes!

Winter flying is indeed something else. Our types of aircraft were not designed to traverse snow covered, iced-over ground so take caution: you are in a new environment (it is not a four wheel-drive!). Some very simple things: the Piper step is a small piece of cold metal, dark in color; it can be iced over even from previously stepping on it during preflight. The black walkway can be black ice. Stepping down from the wing onto ice can be dangerous. *Be sure not to be the next uncontrolled human flight!*

Clearing the Air by David Mikhail

Following a brisk yet confident preflight and runup, the tower clears you for take-off. The aircraft surges forward with bravado as you advance the throttle. Within moments, you leap off the tarmac and climb into the smooth brisk morning air. The aircraft performs impeccably, and you settle in for the cruise phase of flight, and contemplate the rather sudden onset of a headache. It's odd, you think, after all you enjoyed a full night's rest, and you reviewed the IMSAFE checklist before heading to the airport. Within a few minutes, the headache is accompanied by fatigue and dizziness. Instinct tells you that something just doesn't seem right.

The antagonist in this scenario is colorless, odorless, tasteless and quick to incapacitate—carbon monoxide. The risk of exposure to carbon monoxide is of concern year-round, but is greater during chilly weather. In most general aviation aircraft, cabin heat is drawn through a shroud that surrounds the engine exhaust. A crack in the exhaust system introduces a direct pathway for carbon monoxide into the cabin through the heat system. However, carbon monoxide present a challenge in warm weather too. Pilots should be attentive to recognizing symptoms, remediating risks, and terminating a flight as soon as possible when exposure to carbon monoxide is suspected.

Leaning the engine is a staple step while configuring an aircraft for cruise flight to maximize engine performance and longevity as well as fuel range. Since carbon monoxide is a byproduct of incomplete fuel

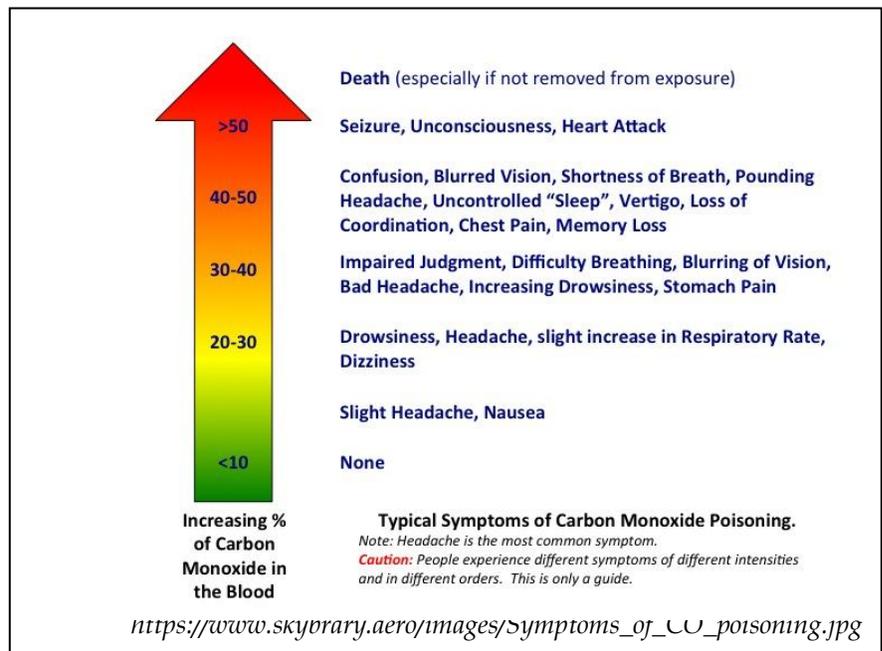
combustion, resulting from running an engine mixture too rich, an added benefit to leaning the engine is the complete combustion of fuel. The phases of flight with greatest risk of exposure to carbon monoxide are while taxing, climbing, and descending--when the fuel mixture is set to full rich.

In the cabin, exposure to carbon monoxide impairs cognitive and motor skills of pilots, and if uncorrected may be fatal. Even in low doses, the effects of carbon monoxide are amplified at higher altitudes. Likewise, vision at night is particularly sensitive to oxygen levels. For this reason, the FAA recommends the use of supplemental oxygen at night above 5,000 feet. Exposure to carbon monoxide at night has a pernicious effect on a pilot's visual acuity at night well below 5,000 ft.

During normal respiration, red blood cells transport oxygen from the lungs to cells throughout the body, and return to the lungs laden with carbon dioxide which is then expelled from the body. Exposure carbon monoxide leads to hypoxia because hemoglobin, a protein in red blood cells which binds to oxygen, has an affinity to carbon monoxide that is two hundred times greater than oxygen. In fact, the bond is so great that following exposure at sea level, it takes 5 hours for carbon monoxide to disassociate from hemoglobin. Sustained or repeated frequent exposure to carbon monoxide leads to progressive oxygen starvation (hypoxia).

Steps to mitigate exposure

A thorough inspection of the aircraft is essential before each flight. At night, an inspection with a flashlight is obligatory. Close attention is paid to the engine and exhaust system for cracks, holes or white powder-like residue at joint seams.

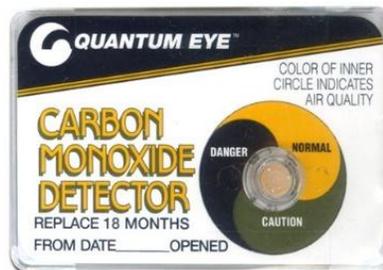


For your safety, both N55044 and N32028 are equipped with carbon monoxide detectors, which is affixed to the instrument panel. Think about including the detector in your scan at each phase of flight or checkpoint.



Should the indicator turn green or black, or if you suspect carbon monoxide:

- Turn off the cabin heat
- Open all fresh air vents
- Open storm window if practicable
- Land as soon as possible
- Advise Air Traffic Control
- Ensure a lean fuel mixture
- Seek medical attention after landing



Be sure to bring preflight or inflight findings to Col. Charles Skelton's attention.

Additional reading:

<http://www.tc.faa.gov/its/worldpac/techrpt/ar0949.pdf>

<https://www.faa.gov/pilots/safety/pilotsafetybrochures/media/CObroforweb.pdf>

https://www.doi.gov/sites/doi.gov/files/migrated/aviation/safety/upload/PB_2005-02.pdf

ADS-B IN OUR AIRPLANES

The board has reserved a slot for our aircraft to have ADS-B installed during the first two weeks of January. This should allow us to get the \$500 FAA rebate. We plan to install an L-3 NGT 9000 in 32028 (although that may be delayed depending on the work done in Barnes regarding the corrosion program) and one of 55044's radios, since 55044 will have a Garmin GTN650 GPS unit installed, along with a GTX345 ADS-B solution.

Those flying 55044 will need to get additional training to become practiced in using the new Garmin. Below are some online resources so you can use to become familiar with the equipment:

GTN 650 Features Overview (Aircraft Spruce) -- https://www.youtube.com/watch?v=VPke-jhp_8o

GTN Intro Part 1 -- <https://www.youtube.com/watch?v=ILhqwalukDM>

Part 2 -- <https://www.youtube.com/watch?v=cN-kK7fnaKg>

Part 3 -- <https://www.youtube.com/watch?v=6Rvlpagvkms>

Part 4 -- <https://www.youtube.com/watch?v=SUUcmNUIZX0>

Part 5 -- <https://www.youtube.com/watch?v=sH8Y09rILXQ>

Part 6 -- <https://www.youtube.com/watch?v=LulttBbUYmI>

Part 7 -- <https://www.youtube.com/watch?v=w3VgRMSJ3h0>

Sample of FlightTrainingApps https://www.youtube.com/watch?v=Ew_-SHWCIUQ

iPad Pilot News Overview of GTN iPad Trainer -- <https://ipadpilotnews.com/2017/10/garmin-gtn-avionics-trainer-gets-big-update-now-free/>

GTN Trainer App -- <https://itunes.apple.com/us/app/garmin-gtn-trainer/id479670018?mt=8&ign-mpt=uo%3D8>

Any comments or questions, please contact **Charlie Skelton**.



HOW WE TREAT OUR AIRPLANES! When you arrive at the airport, you should expect the aircraft to be in the following condition:

- **TAKE OUT THE TRASH!** Please be sure any spare paper, charts, etc are removed after your flight.

- **CAREFUL WITH THE BRAKES!!** We have had 5 tire changes in the last year, with "flat spots" often seen on the tires of both airplanes. This is most commonly caused by landing while holding the brakes or braking too hard to make the first turn off the runway.



PLEASE, be kind to the tires, and watch how you are using the brakes.

- Tied down securely, with proper knots, taut lines, and no spare length of rope that can whip around in the wind. The pictures at right are NOT acceptable tie-downs!!!! Please ask if you need a demo or some practice in this vital area for airplane security.
- Gust lock is in position, window closed, aircraft locked, **COVER ON!**
- Sunvisor is in position and correctly oriented, if no cover is in place.
- ALL instruments turned off – especially check the transponder! – **particularly important for doing the hot mag check at shut-down**, since an unexpected electrical surge could fry delicate avionics equipment left on!
- Fuel tanks topped off in winter or to the tabs in summer.
- Interior neat & tidy, no trash.
- For 044, the seat-back covers (those "caps" that slip over the top of the seat to prevent wear on the fabric) should be in place!



If the aircraft is not up to this standard, please let chief pilot **Charlie Skelton** (203-640-3580) know so he can improve matters. ***Be sure to leave our airplanes secure and clean*** – just like YOU would like to find them!

We like to encourage our members to take the airplanes and make use of them, but PLEASE remember that if you find you need to have fuel for the planes or take them in or out of the hangars afterhours, this will result in a **CALLOUT FEE of \$150** that will be charged to Yale Aviation and passed on to you. The easiest way to avoid these fees – and work well with the kind line folks at Robinson – is **FOR YOU** to let the Robinson front desk know well ahead of time if you need fuel or wish to use the airplanes early or late. Please be as considerate as you can of their time and efforts.

In addition, there is a drop box to the right of the doors to the hangar nearest the FBO entrance from the ramp. This is where you can leave airplane keys if you return to the airport after Robinson has closed. PLEASE be considerate of your fellow aviators.

Any questions? Please give **Charlie Skelton** a call and he can go over both dropbox use and what constitutes a callout!



32028 is AOK. It will spend the first week of January at KBAF (AreoDesign) where it will commence its corrosion program, have some of the cracks repaired, and inspection panels installed in compliance with the recent AD. It will then go to Stellar at KSNC for ADS-B installation, and to receive the old radio from 044.

55044 will be spending the 2nd to 3rd weeks of January at Stellar (KSNC) to have a Garmin GPS and ADS-B installed.

ALSO NOTE:

1. The reupholstered seat that had been placed on the left side has been returned to the right side. Some slippage had been reported when the recently upholstered seat was in the left position. Please be sure to check that the pins are secure before you start the aircraft – this is accomplished with the lever neither too far forward nor too far back!
2. We are working on mitigating a persistent leak through the door of 044. Please let Charlie Skelton know if you ever find dampness when you are doing pre-flight.
3. Remember: **ONLY remove the cowling when you have at least two (2) people**. Scrapes and chips can easily occur, and this is most probable when you try to remove the cowling with one person only!

AVIATION EDUCATION & NEWS –

You have asked us to notify you when a webinar is scheduled that meets your criteria. The following webinar may be of interest to you:

"CFI War Stories Learning from Our Peers presented by Steve Goetz"

Topic: This presentation will discuss the value of storytelling as an instructional tool and use stories to illustrate their usefulness

On Wednesday, December 20, 2017 at 19:00 Central Standard Time (17:00 PST, 18:00 MST, 20:00 EST, 15:00 HST, 16:00 AKST, 18:00 Arizona, 01:00 GMT)

Select Number:

CE0379875

Description:

This presentation will discuss the value of storytelling as an instructional tool and share stories to illustrate their usefulness. Participants will gain a

new set of stories to tell their students to illustrate points for emergencies, student instruction and environmental concerns and ultimately know how they can take this format to their home airport communities and set up activities to encourage community learning from storytelling.

To view further details and registration information for this webinar, [click here](#).

The sponsor for this seminar is: **FAASTeam**
The following credit(s) are available for the WINGS/AMT Programs:

Master Knowledge 2 - 1 Credit

PODCASTS & APPS & GADGETS– Please send me your favorite app, tech toy, video or podcast suggestion to share!

Cool time-lapse video of arriving airplanes:

<http://www.boldmethod.com/blog/video/2015/10/aircraft-arrival-timelapse-san-diego/>

TWEED NEWS -



TSA Badges – Need a new or renewed badge?? Remember that for the procedure you must have a completed application signed by our TSA signatory, **Laura Baldwin** (203-966-8499, lfbaldwin@aol.com). Once that is done, you call KATHY GRANT (203-466-8833 ext 109) over at WEST ramp to make an appointment to take training, have your fingerprints taken, pay

your fee of \$30 (cash or check made out to “HVN”) and have your new badge issued. Renewals are \$15, which we all need to do every calendar year. Be sure to have your old badge plus two forms of government issued ID, and at least one **NEEDS TO BE PASSPORT, SOCIAL SECURITY CARD OR BIRTH CERTIFICATE**. **Tweed is becoming quite serious about everyone having and using their security badge** – pilots without badges will be escorted from the airport and will not be able to fly!!! Do not be that pilot – get your KHVN badge NOW!!!

ONLINE -

Yale Aviation is on Facebook - be sure to post photos, ask questions of fellow pilots, encourage those who are working their way through ratings and exams, or see if you can organize a passenger on your next flight. We have opened this group so that your friends (and prospective members?) can see what we are all about.

Remember pictures can also be posted on our Yale Aviation website at www.YaleAviation.org. **Tom Sobocinski**, our Webmaster, has updated the site to include a gallery of names and faces, current Newsletters and the full 12-serie Yale Aviation, Inc History by **Hank Galpin**. Check it out!!! (Suggestions for further revisions welcome)

IF YOU DON'T LIKE YOUR PICTURE ONLINE, PLEASE SEND ME A BETTER ONE!



YA MERCHANDISE! Check out our two online “storefronts” for purchasing YA-logoed merchandise! One is at located at Customized Girl



(<http://www.customizedgirl.com/s/yaleaviationmerch>) and one at Zazzle (<http://www.zazzle.com/yaleaviationstore>).

What you order from these locations will be delivered directly to you, **PLUS a portion of the sales will come back to the club.**

Contact Laura Baldwin (lfbaldwin@aol.com) if you have any questions or have ideas for additional merchandise!





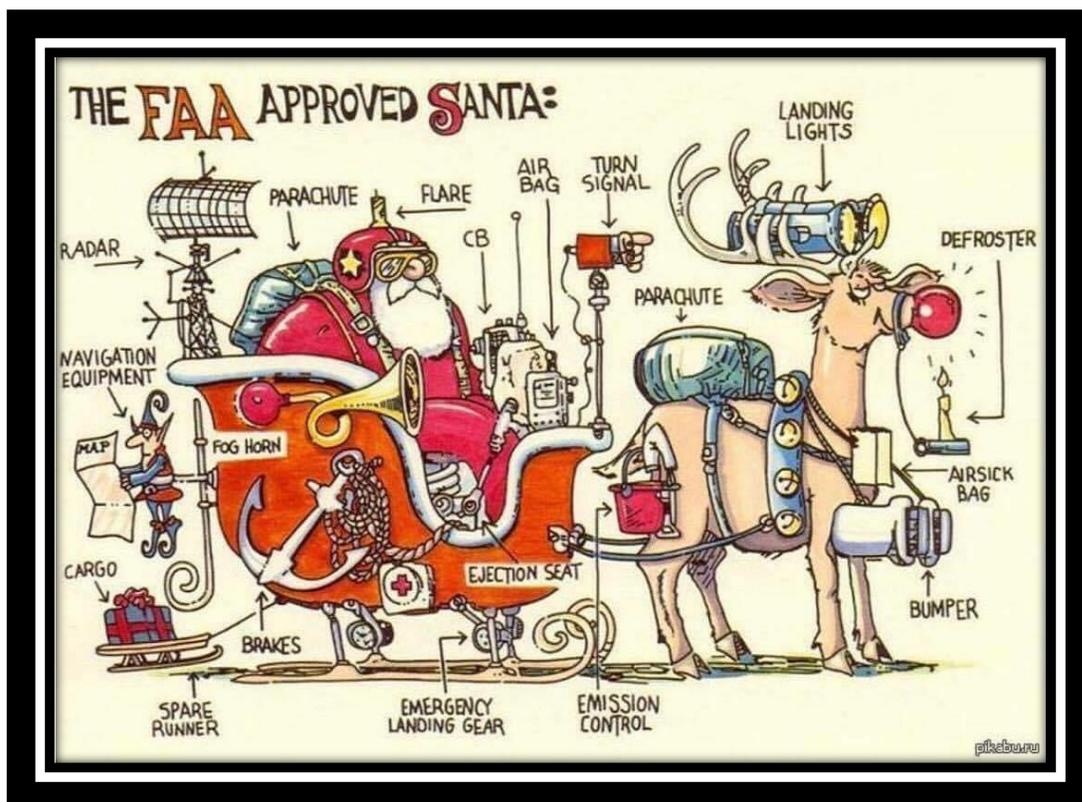
We're taking part in **Sporty's Flying Club Rebate Program** which means we will receive cash back for our club on all your purchases from Sporty's. Every time you make a regular purchase at Sporty's – either online, at 800.SPORTYS, or in their store – we will receive a 5% cash rebate, using your email to link these purchases to our club.

Of course, this program is a great way for Sporty's to steer business their way, but we have an opportunity to also reap the benefit. With your participation, this will be a win-win for all of us. Go to sportys.com or call 800-SPORTYS – no special code needed.

If you have a friend or family member who buys presents for you, be sure to let me know so I can get them added to our club list. Anyone who is NOT on that list will not get us our rebate, even if they are buying for someone on the list!!

SIMULATOR -

The simulator has been moved to a new, improved, and easily accessible location! It now lives in the "Hangar" of the Yale AFROTC suite. The address for the simulator is 55 Whitney Avenue, Suite 450. For those with Yale Net ID's that would like to gain access to the building and the simulator, send an email to Micah@yale.edu with your name and Yale Net ID. He will work with the AFROTC team to give you access. If you do *not* have a Yale Net ID, you will need to gain access to the sim, if desired, through Charlie Skelton or another club member with access.



The Yale Aviation Newsletter goes out to the membership on the 15th of every month. Please let me know if you have any news, suggestions, or comments:

YASecretary@aol.com

Laura Baldwin, Secretary