

# EAA Chapter 100

# February 2016 Newsletter

http://eaa100.org

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EAA Chapter 100 is a nonprofit association involved in the promotion of aviation through adult and youth education, hands-on training, building and maintenance of experimental aircraft, and through community awareness programs.

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Reader submissions and comments are strongly encouraged.

The next Chapter 100 Hangar Flying Event will be Friday, February 12<sup>th</sup> at the Dodge Center Airport Terminal. Hosted by Tom Hall. The fun starts about 1900L. Everyone is invited. You do not have to be a pilot or builder – just interested in aviation.

The January 15th meeting was called to order at 1900 hrs. 17 members present! Dick Fechter gave a presentation on his planning for a flight from RST to Southern California. We watched the current Chapter video and learned about Chapter Name Badges; to be investigated. Excellent turn out on a frigid evening. Next We have 21 paid members to date. Respectfully submitted; Tom Hall Secretary / Treasurer.



The chapter picked up two new members. Glen Jackson who has built an RV-4 and is building an RV-6. Kathy Lessard is working on her Private Certificate. Welcome!



In an effort to lower my workload and the size of this newsletter, I have included many optional links to subjects that should be of interest to chapter members. I'm sorry, but Adobe often gives you a security warning about opening links. I have checked these out along with Norton and they all seem safe.

The Chapter had a Business Meeting Jan. 26<sup>th</sup>, 1830, at the "Bear's Den" in Byron and President Jeff Hanson presided.

1. The very depressing decision was made to stop doing any more Young Eagles events until policies change. Our three YE directors had come up with a great plan that Dan Crandal briefed. Everything was coming together very well with a lot of support from the Rochester International airport, Signature Flight Support and the Ronald McDonald House. However, Jeff and John Hanson then briefed us on the new YE "Youth Protection Program".

This new program would involve background checks and submitting sensitive personal data by any and all persons who have any contact with children. We are seeking clarification. If the current proposal stands, we feel Young Eagle's may be no longer viable.

The difficulty in attempting to comply with the new requirements including background checks, manpower and documentation requirements would prevent us from being able to administer a YE program.

In the past it has been difficult to find volunteers and we relied on those who showed up to help with duties. To get volunteers to submit to a background check which includes such things as social security numbers entered into a website weeks ahead of time was probably the biggest obstacle discussed. For our chapter, usually not more than 2 would handle the signing in of pilots and young eagles – often a spouse, friend or other relative of a pilot or other non-EAA member would help. Any pilot with a HQ EAA membership could fly if they had the proper pilot/aircraft credentials (currency, flight review, medical etc.). It's a shame that a couple bad apples have stopped such a great program. This is extremely disappointing to everyone involved.

Here are some links discussing the program so you can better understand the problem.

- EAA Youth Protection Policy
- EAA Youth Protection Policy and Program
- FAQ for Youth Protection Program
- EAA Forum concerning "Background Security Checks
- 2. We discussed having a volunteer work party help at E HQ. After discussion, we decided it was a "good idea" and agreed to explore further details. The logistics of food and lodging need to be understood to see the true "cost of volunteering".
- 3. We also discussed providing a bus trip to AirVenture for anyone wanting to attend for one long day. Dan Crandal provided this several years ago, but cannot do it in 2016. We are looking for several volunteers to make it happen this year. Positions required would be advertising, getting a bus, getting riders and their money, ordering tickets and answering questions/phone calls. Please let any board member know if you could volunteer to help on this very worthwhile committee.
- 4. We decided we would not have a "Banquet" this winter. Our summer picnic has always been much more successful and fun with a lot less prep work.

**User Fees:** I think most pilots have heard that Sen. John Thune, chairman of the Commerce, Science and Transportation Committee would like to privatize ATC. Sen. Bill Nelson, is the ranking member and chief cheerleader for this bid to privatize ATC and our Senator Amy Klobuchar is on this same committee. *The following is not necessarily the opinion of EAA, but of your newsletter editor.* Along with privatization would eventually come user fees for GA. You might get a bill every time you talk to ATC or use their airspace. ATC would be separated from government control and run by a non-profit corporation. This corporation would be heavy with

the airline industry pushing their agenda. Below are links explaining the situation. The good news is the same bill has our much awaited 3<sup>rd</sup> class medical reform attached.

- EAA "FAA Authorization Bill Won't Fix ATC Funding Problem, Creates New Ones for GA"
- AOPA "Details of Long-awaited FAA reauthorization bill revealed"
- Flying Magazine "FAA Funding Bill Includes a Mixed Bag of Good and Bad"
- AlNonline "Genav Remains United Against U.S. ATC Privatization"
- AVweb "FAA Funding Bill With Privatized ATC Introduced in House
- AVweb "Politicians Weigh In On ATC Privatization"
- AVweb "User Fees, ATC Privatization Coming Back To Congress"
- AVweb editorial "How Many Are Going to Die, Mr. President?"
- AVweb "Senate Committees Spar Over FAA Privatization"
- AlNalerts "Bizav Access to Airspace, Airports Under Threat"
- KimKomando "Be heard in Washington, D.C."

Call, email, fax, and write your representatives about how you feel and the potential effects of privatization. Each of them also has an office in Rochester. Klobuchar's office usually has Chuck Ackman there on Mondays and Fridays. Take your letters to the second floor of 1130 ½ 7th Street NW for all 3. That building is near "Everything Hobby".

### Franken, AI - (D - MN)

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### A Friendlier FAA

The January/February 2016 issue of <u>FAA Safety Briefing</u> focuses on the FAA's new Compliance Philosophy and what its foundational concepts mean to the general aviation community. Articles in this issue discuss how the agency and aviation community can identify a problem in the NAS, use the most effective tools to correct that problem, and monitor to be sure it stays fixed into the future.

If a pilot finds himself/herself with a violation that resulted from flawed procedures, simple mistakes, lack of understanding, or diminished skills: Compliance action might include:

- On-the-spot correction
- Education

- Additional Training
- Counseling
- Improvements to systems, procedures, and training programs

As FAA Safety Representatives, Derwin Hammond and myself have volunteered to help the FAA administer some of these remedial actions. We just hope no one reading this is ever on our list.

### **Icing**

# Anti-Icing for aircraft wings

At Virginia Tech, researchers are working to prevent the accumulation of frost on airplane surfaces. Using a technique called photolithography, engineer Jonathan Boreyko and his team have developed patterned surfaces that repel water, preventing the spread of frost. The patterns were inspired by the shell of the Namib Desert Beetle, Boreyko said. The insect has a bumpy shell that collects moisture, which then is directed down smooth channels into the insect's mouth. "I appreciate the irony of how an insect that lives in a hot, dry desert inspired us to make a discovery about frost," Boreyko said. "The main takeaway from the Desert Beetle is we can control where dew drops grow. When the dots are spaced far enough apart and one of the drops freezes into ice, the ice is no longer able to spread frost to the neighboring drops because they are too far away. Instead, the drops actually evaporate completely, creating a dry zone."

# Icing Info

Whether your airplane is approved for flight in known icing conditions or not, there are a number of common-sense strategies you can put into practice to minimize your risks of ice-related hazards.

First, never take off with any amount of ice, snow or frost on your airplane. If you do, you're a test pilot flying an aerodynamically unproven aircraft. Contamination as thin as 80-grit sandpaper can cause a 25 percent loss of lift.

Next, determine where the freezing level is and try to stay several thousand feet below or above it, or clear of clouds.

At the first sign of ice, do something. Climbing is often your best bet since you might not be able to regain altitude if you descend. Better yet is to make a gentle 180-degree turn and retreat.

If you must climb or descend through icing levels, do so as quickly as possible. Consider delaying your descent into icing conditions until you're as close to your destination as possible.

Don't let ATC put you in a dangerous situation. Tell them you need priority and don't be afraid to exercise your emergency authority to do whatever you need to do to stay safe.

Also keep in mind that fuel consumption increases dramatically as more power is needed to keep an ice-laden airplane aloft.

If you're loaded up with ice, find a long runway and keep your speed up all the way to the surface. Don't use flaps, which can lead to a sudden tailplane stall.

Finally, be prepared for poor braking action if the runway is covered with ice, snow, slush or water.

For more icing survival tips, pick up a copy of the January issue of *Flying*.

## From the FAA FlySafe Topic for January

<u>Best Glide Speed</u> It's important for pilots to understand the safety benefits of flying at best glide speed while maneuvering to a forced landing runway or off airport area. Check out the fact sheet at <a href="http://1.usa.gov/1OZtHgN">http://1.usa.gov/1OZtHgN</a>

**Prevent Loss of Control Accidents:** See the FAA news release www.faa.gov/news/updates/?newsId=84506

#### **New Aviation Weather Product**

The Aviation Weather Center (AWC) has announced the availability of the Experimental Graphical Forecasts for Aviation (GFA) product. An overview, technical description and tutorial are available on their website: <a href="http://new.aviationweather.gov/areafcst">http://new.aviationweather.gov/areafcst</a>. The Experimental Graphical Forecasts for Aviation are designed to provide meteorological information equivalent to the textual Area Forecast (FA) in a graphical format.

Please check out the rest of the <a href="http://new.aviationweather.gov">http://new.aviationweather.gov</a> site. The graphical area forecast is only a small – but important part of a very extensive self-brief weather site. Under the about tab there is "help" and "FAQ" sections. Once you have had a look, go to the "Survey tab under "forecasts" then "area forecast" to tell them what you think

# Who's Flying the Airplane?

- AVweb FAA Rapped On Pilot Skills
- AVweb FAA Wants GA Hand Flying Skills Checked

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**Stupid Pilot Tricks -** The ill-fated outcome of any aviation mishap isn't funny, but the process that leads up to that mishap can be instructive—and make us laugh at seemingly mindless antics.

A great Newsletter from <u>Gene Benson</u>. Also sign up for his webinar for February 25<sup>th</sup> on Loss of Control. LOC is behind about 1/3 of our GA accidents.

Video on faking an inflight emergency.

Accident Prevention Facts from the Master, Part I. Some great rules to live by.

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Go to <a href="http://www.mnpilots.org/">http://www.mnpilots.org/</a> for more information

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Old Aviation Truths for a New Year - These were just too good to only make a link.

# **Pushing It**

The weather is not going to get better in another five miles.

If you are trying to scud-run, the weather will get worse.

Towers and power lines are affected by weather: They get taller and move nearer to highways, railroad tracks and airports when the ceiling gets very low.

You are most likely to discover an unlighted tower when you are trying to fly low because of weather.

Power lines are invisible against backgrounds other than blue sky.

Scud running used to be a reasonable method of getting to one's destination in the flatlands of our country. Now, with the stunning proliferation of towers—particularly near highways—it is foolish. To do it with any regularity is suicidal.

One close encounter with a tower or a set of power lines appearing out of the haze or fog when scud-running, or going below minimums on an instrument approach, will give you years of the most hideously vivid nightmares you can imagine.

It's not the smartest thing in the world to duck under the glideslope after breaking out of the clouds so as to land short. Many more airplanes crash in the approach lights after an ILS than go off the far end of the runway. There are no prizes for the shortest landing following an ILS.

There is less gas in the tanks than you hope.

The worse the weather, the more likely it is that you will have a vocal passenger insisting that you go.

When you really, really want to make the trip, the weather will always be just a little worse than either your capabilities or those of the airplane.

It is invariably better to be fervently wishing you had flown than had driven.

The posters on the walls in Air Force Flight Ops rooms were right: There is no reason to fly through a thunderstorm in peacetime.

When making a decision regarding weather, an effective tool is to ask oneself if this might lead to looking stupid in the NTSB report.

Being introduced to flight in ice by an instructor under controlled conditions is hugely valuable and is far, far better than trying to learn about it vicariously or as you start getting ice on the airframe for your first time without an instructor next to you. Oddly, unless the airplane is approved for flight into known icing, that smart practice is illegal.

If you do get ice on the airframe, do not use the flaps on landing. Go fast and do not reduce the power below what you carried on final approach until the wheels touch the runway. Pulling the power off in the flare can cause you to stall and plummet the last few feet to the runway with enough force to collapse the landing gear.



It's always better to turn back too early than too late.

### Reality

Departing with one component of a redundant system out of service will make the other one fail in flight.

When flying a tailwheel airplane in a crosswind, hard-soled shoes are an invitation to a groundloop.

Even pilots who fly every day need recurrent training. It's the stuff you don't do every day—emergency procedures—that will eat your lunch.

Despite what fighter pilots say, it's better to be embarrassed than dead.

Saying, "any traffic please advise" on Unicom is a waste of words and air time—it gains you nothing that you would not get from a simple position report and it aggravates enough pilots that those who would be of interest to you may say nothing.

Store the batteries backwards in the flashlight; that way, if the switch is turned on, the batteries won't go flat.

A turning propeller is invisible. Nonpilots are known to walk into them. So are pilots.

The small problem with your airplane that you have delayed fixing will become a major problem at the most remote airport on your trip.

Trying to argue with a controller over the radio is akin to shaking your fist at bad weather; you can't win and you run the risk of making things worse.

An intermittent problem will remain so until you throw nearly enough money at it to replace the entire system involved.

Lean-of-peak engine operation is the best way to run your fuel-injected engine if you have an engine monitor. Those who haven't caught on yet may be unable to learn or just unwilling.

There is no need to say "with you" when contacting a new controller. It's redundant, uses up air time on increasingly crowded frequencies and most controllers are sick of hearing it.

The world looks different when flying very low, especially when trying to maneuver. That's a major reason why turning back after an engine failure on takeoff, when you haven't practiced it, has a distressingly high fatality rate.



While speed may be life to fighter pilots, that's only in combat. The reality is that appropriate speed is life: too little after takeoff kills, as does too much on landing. Extra speed on final is not your friend. Extra speed on touchdown is your enemy, because force is a squared function. You've got enough energy to dissipate on landing when touching down near stall speed; anything faster is adding to your challenge.

#### The Really Unpleasant Stuff: Crashes

Fuel tanks in front of the cabin or in wing leading edges are an invitation to post-crash fire.

Nylon and polyester clothing melts in the presence of intense heat and sticks to you, causing serious burns.

It's been said by so many because it's so true: Fly the airplane all the way into the crash. So long as it's moving, never give up trying to control the airplane and making it go where you want to go.

Not insisting that your passengers wear their shoulder harnesses should be a criminal offense; not wearing yours has proven terminally foolish for too many pilots. Shoulder harnesses can be

retrofitted on all seats for all single-engine Cessna airplanes (and the Skymaster series) back to the 1945 model year. (The hard points were put in at the factory. Shoulder harnesses were always offered as an option, but nobody bought them.)

Especially in a twin, if you have to put the airplane onto the ground, do it as nearly wings-level as possible and do not stall the airplane prior to touchdown. Airplanes, even old ones, are surprisingly crashworthy (if shoulder harnesses are worn) but not if you hit upside down or with a substantial vertical-force vector—as after stalling.



If you have to land the airplane gear up, do so on a hard surface runway. If you screw up and stall, the runway will translate the force into a slide. On grass or dirt there is the chance the surface will compress slightly, forming a crater and then stop the airplane quickly or flip it, injuring the occupants.

That being the case, to the extent I have been able to chase accident records, there hasn't been anyone hurt in a gear-up landing in more than 50 years—so long as the pilot did not try to "save the prop" by shutting down the engine(s). There have been a number of fatal accidents when pilots shut down the powerplant and proceeded to crash short of the runway or go off the end at high speed.

Going around if the approach isn't just right is never an indication of incompetence unless, of course, you are about to run out of fuel.

There are Neanderthals in this world who will gather to critique landings and make snide remarks about pilots who go-around. There have been accidents at flight schools and airports where this practice takes place because pilots pressed on and landed out of a bad approach because they knew they would be laughed at for going around. There is reason to believe that pilots who criticize other pilots for making a go-around will spend eternity in one of Dante's circles of hell reserved for those who drive airplanes rather than fly them.

Successfully managing energy in the process of coming to a stop is the key to any landing—or accident. Slow is always better than fast when it comes to surviving. Going off the end at 25 knots is far better than crashing short of the runway at flying speed.

Even the slowest airplane goes fast enough to kill you and thus the most modest trainer deserves the same operational respect as the Mach 2 fighter.

### **Pilots**

A pilot with any poetry in his or her soul knows that it is always appropriate to quietly thank the airplane for a flight after putting it away. In fact, some assert that those who do not do so may have no soul and should not be allowed in the sky.

The cliché is depressingly true: The chances of making a superb landing are inversely proportional to the number of people watching.

If a pilot has not practiced something, the accident reports make it clear that the chances that he or she can do that something in an emergency are lousy—be it scud run, turn back following an engine failure after takeoff or stop the prop and make a safe landing when the gear won't come down. A lot of people get killed each year trying to do something brand new when they have an emergency. So, go with what you know and have practiced, even if it means damaging the airplane. That's why insurance exists.

When in doubt about a clearance, ask. Even a snide remark from a controller (which happens to be rare) is not nearly as embarrassing as a violation for deviating from a clearance or, worse yet, smacking into another airplane.

Pilots who have spent time in gliders and tailwheel airplanes tend to be much better stick and rudder pilots than those who have not. Significantly better.

Most pilots who make jokes about helicopters are secretly jealous and deep down wish they had the opportunity or money to fly them regularly.



If you do something moronic down low, such as buzz someone or something, don't be the least bit surprised if someone complains. With cell phone cameras and small video cameras, there's a good chance that when they do complain they'll also have the evidence to convict you. Remember, in the PSA San Diego midair, the 727 descended vertically, on fire, for fewer than 30 seconds. There are good-quality photographs of it. And that was nearly 40 years ago. Even more people carry cameras now.

# Of Flight and Life

It is almost invariably worth it to get up very early so as to be the pilot in command of an aircraft taking off at sunrise. At the moment of liftoff the world transforms itself from black and white to full color. It is especially true in a balloon.

We are always ambassadors for aviation, for good or for evil, simply because there are so few of us. Our actions are watched and we are the source of comment, often when we least expect it or maybe even want it. Therefore we have no choice but to be a good example all the time.

The round rainbow around your airplane's shadow on a cloud is called a glory. The first time you see one the name will make eminent sense.

Pushing the prop to high rpm on downwind makes much more noise than you realize and pisses off far more people than you can imagine. And they are the ones who will vote to close your airport.

Spend as much time as possible on grass runways. They are good for the aviator's soul. If you can, take a walk on one (yes, avoid airplanes) and think about all of those who have come before you to use it as a place to reach into the sky. You might also consider it to be more than just a strip of grass, but as a place from which you can launch in the most modest of airplanes and proceed to go anywhere in the world.



No matter how modest, an airplane that lifts you into the sky is a real airplane. It doesn't get any more real than that; there are only differences in degree.

There is nothing more beautiful than this world when viewed from aloft.

Rick Durden holds an ATP with type ratings in the DC-3 and Cessna Citation, is a CFII and is the author of The Thinking Pilot's Flight Manual or, How to Survive Flying Little Airplanes and Have a Ball Doing It, Volumes 1 & 2.

I think the IMC Club organization for the Rochester area is starting to come together. Radek Wyrzykowski called me and sent me an email with more information. I have completed their application and registered for the webinar training session.

Nothing is locked in concrete but the application wanted to know the proposed place and times for meetings. I said the first Saturday of each month, 0800 at Signature Flight Support.

I'd like to try for Saturday March 5th as the first meeting and get a feel for when and where potential members really want to have the meetings. I chose this date/time because maybe some of us would like to grab a fellow safety pilot and do some hood work after the meeting. Our Spectrum Pilot Service has let me know that 0730 would work better for them because of student load on Saturday mornings. I should have my webinar training completed by then also.

If you are interested in joining IMC Clubs and did not let me know from a previous email, please send me an email to <a href="mailto:imcclub@44rf.com">imcclub@44rf.com</a>.

More information is available at: <a href="http://www.eaa.org/en/eaa/aviation-communities-and-interests/imc-club">http://www.eaa.org/en/eaa/aviation-communities-and-interests/imc-club</a> and <a href="http://www.IMCClubs.org">http://www.IMCClubs.org</a>

**Dues Due:** Chapter treasurer, Tom Hall notes the 2016 \$10 chapter dues can be paid anytime. Only members who have paid their dues are allowed to vote at business meetings.

Steps to EAA Chapter 100 Membership:

- Have a fascination or love of flying. You don't have to be a pilot or be building an airplane, you just have to be interested in the same.
- Join the National EAA (http://www.eaa.org/eaa)
- Pay the \$10 chapter dues to our Secretary/Treasurer or any officer
  - o Treasurer is Tom Hall, 331 Riverview Heights Drive N.E. Rochester, MN 55906.
- It would be "nice" if you would fill out our questionnaire and send it with your check.

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