

EAA Chapter 81 Meeting Minutes
February 14, 2026

Meeting was called to order at the Ryan Field Meeting Room at 1100 by President Ray Puckett.

The first order of business was a presentation by Mike Stringfellow on Thunder and Lightning, mostly lightning. Mike was born in England and ended up in Tucson by way of South Africa. He's a glider guy: hang gliders, paragliders, and sailplanes (thousands of hours). He describes lightning as a "heat engine", as electricity is a tiny fraction of the energy of a thunderstorm. The rest is the movement of hot and cold air. Rain cools the air, causing a vertical downdraft, and the outflow is the result of that downdraft. This causes rising air as you approach the thundercloud; good for gliders! Most of the lightning is within the cloud or from cloud to cloud. It is negatively charged and comes down from the top of the cloud in steps, which can be recorded by high-speed cameras. As it approaches the ground, positively-charged upward-connecting leaders rise to meet it. Following strokes of lightning tend to follow the path of the previous ones, although forks can begin their own pathways. The proverbial "Bolt from the Blue" refers to a positively-charged very-high amperage lightning that emerges from the top of the cloud and is of longer duration than the negatively-charged bolts. The positively-charged lightning can strike as far as 25 miles from the cloud.

Next, Mike presented a few myths about lightning and some corresponding facts:

Myth "Facts"

- People struck by lightning always die - 90% of those struck survive
- Lightning burns folks to a crispy critter - Severe burns are rare, although nerve damage can occur.
- Persons struck by lightning carry a charge and are dangerous to touch. - Nope.

Direct strikes are only 3-5%, perhaps a third are what are called side-flashes, with up to half from ground current. Contact injuries include fences and trees, so stay away from those in a thunder storm. Not only can trees carry the current, but they can heat and explode like a fragmentation grenade. Demographic: >80% of those struck by lightning are male, 20 - 25 years old. Interestingly, the same demographic applies to snake bites! Explanation: "Guys do dumb things".

What to do when caught in a thunder storm: Seek a metal structure and get inside; even a car forms a Faraday cage, conducting the current around you. Tires, by the way, are not insulators; there is carbon in the rubber and steel belts as well. In fact, it is not uncommon for tires to blow out when a car is struck by lightning. Avoid non-conducting tall structures, such as masts, trees or small shelters. Small aircraft are not protected from lightning strikes, unlike airliners, which have static wicks and continuous metal conduction paths and surge-protection/shielding of electronics, not to mention lightning warning and tracking capability. Stone and brick buildings are unlikely targets for lightning, but in Arizona, where we build homes from wood and paper, lightning rods can be very effective at preventing fires. Remember, most lightning is negatively-charged and the ground is positively-charged. Out in a field, look for low ground and don't be the tallest object!

There is free lightning data available: www.lightningmaps.org, for example. These are provided mostly by a network of volunteers.

Mike's presentation was very well-received and we hope he will have other topics to bring to us.

Visitors:

- Glenn Martig is an aircraft electrician. He is a member of EAA Chapter 237 near Minneapolis, MN and flies a Cessna 172. His chapter was very active in restoring the North American B-25 Mitchell medium bomber owned by EAA and featured in the movie *Catch 22*. Glenn also belongs to Ultralight Chapter 12, also near Minneapolis, and is the No. 1 Young Eagles Coordinator in the country!
- Brian Martig, also present, is Glenn's brother.

- Jim McClellan flies his RV-4 off his 1100-foot grass strip. It has a big engine and constant-speed prop and has no difficulty getting into the air. He has an RV-7A as well, has been flying for 60 years, and is seeking others to accompany for cross-country flying adventures.
- Jackie Joslyn will be taking her ground-school test soon and is aiming for Private Pilot.
- Steve Solomon is seeking a CFI to complete his Sport Pilot certificate. He has a Quad Cities Challenger II.

President Puckett once again attempted to play an EAA Chapter Video Magazine episode and succeeded in improving the audio, compared to last month's presentation, but succumbed to other technical difficulties.

This brings us to our second speaker, Tim Tarris, who is mostly single-handedly building a 3/4 scale replica of the Curtiss JN-4 "Jenny", the predominant WW I pilot trainer. All four wings are covered, using the Stewart System (water-based products). His goal is to fly by the first week of April, and he is working 16-hour days to achieve it. He welcomes any skilled help available. The plan is to fly and land in all 48 contiguous United States, ending at Langley Air Force Base in Hampton, Virginia on July 2 in time to celebrate the 250th birthday of the United States of America (dated from the signing of the Declaration of Independence, July 4, 1776). He plans to fly up to 6 hours per day, with the shortest leg 5 miles. Held together by "34 wires", and featuring a whiskey compass from Wal-Mart, top speed is projected to be 65 MPH, propelled by a Rotax 912 ULS 100 HP engine (early Jennies had 70 HP). Right now, the front seat area is occupied by a 20 gallon fuel tank, but later, rides may be available. Tim presented a home-made 5-minute video showing the order of states and landing sites on his route. After Langley, Tim plans to fly on to Airventure Oshkosh. He is seeking a hangar to borrow for two months for finishing his Jenny replica. He is offering free use of his Corvette for a chase driver, all expenses paid. President Puckett wants to have a look at the project and may be able to make our Chapter Hangar available to Tim when needed. His presentation was very well-received and we certainly applaud his ambition, drive, and hard work. He is an inspiration to all home-builders.

Other Stuff:

- Alan LaFever, our Scholarships Coordinator, has succeeded in obtaining a second Ray Scholarship from national EAA. The first was \$12,000, awarded to Oliver Russell, a graduate from Southern Arizona Teen Aviation, who passed his Private Pilot at the end of last year. The second Ray Scholarship is also \$1,200, but national EAA pays \$9,000 and Chapter 81 will provide the remaining \$3,000. This makes our chapter eligible for another two Ray Scholarships for the coming year. Great going, Alan!
- This morning's Pancake Breakfast was carried out successfully by a crew of mostly brand-new volunteers under the watchful eye of veteran PB volunteer and master egg fryer and sausage griller Bob Miller. Sadly it was poorly-attended. PB Leader Steve Hulland, battling health issues and those of his wife, was unable to participate, although he did the shopping for foodstuffs and supplies in advance. Chapter 81 will need a new PB Coordinator if we are to continue providing these events.
- Young Eagles Flight Leader Martin Thomas reported a successful event this morning with fourteen flights. Unfortunately, we are still plagued by no-shows.
- Jim Keown (pronounced cow-in) reminded us that there is a sign-in sheet at the back of the meeting room for those interested in Airventure Oshkosh camping this year.
- There have been issues in moving the Chapter 81 Gleim flight simulator into its proposed new home at the Civil Air Patrol building at Tucson International Airport. With Steve Hulland temporarily out of commission, Ray Puckett will take over the task of finding a home for the sim. In the meantime, it is still available for use by Chapter 81 members at the Southern Arizona Teen Aviation build hanger in Oro Valley during build hours of 3-6 PM Sundays and 5:30-8:30 PM on Mondays. Those interested in trying it out can contact Ray to make arrangements.

Meeting was adjourned at 1215. The next meeting will be held at the Ryan Field meeting room on Saturday, March 14 at 1100.

Respectfully Submitted by
Secretary Bob Miller