



EAA Chapter 100
May 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 Fly-In Event will be **Saturday May 14th** at the Dodge Center Airport (KTOB). The fun starts about 0900.

Everyone is invited to fly in if you can, drive in if you must. Free coffee and rolls until they're gone. We still would like a volunteer to host the food and drink. Call any officer if you want to do this.

We want to thank Rich and Cindy Macrafic for hosting our Hangar Flying Event for April. It was a fun and interesting time.

Young Eagles: The below information is from Dave Nelson, one of the chapter's YE committee members (YoungEagles@eaa100.org). Our YE Rally is scheduled for June 11th with a June 12th backup day in case the weather is bad on the 11th.

This Young Eagles event is going to be focused on kids staying at the Rochester Ronald McDonald house. Just a little background on the house... it's, simply put, amazing, both in its intended purpose and in its implementation. My wife Ali has been volunteering there for many years, along with our Golden Retriever Tucker, who is a therapy dog. It's been really fulfilling to be a part of such a great operation. One thing you may not be aware of is that not all of the kids staying at RMH are clinic patients. Entire families come and stay, sometimes for months or even longer - Moms, Dads, children patients and their healthy siblings all live there. And there are *lots* of them! So, I think this is fertile ground for finding Young Eagles!

The Ronald McDonald house for liability reasons cannot "sponsor" a Young Eagles event, but they are very happy to work with us to make it happen. I will be meeting with them this week, and hope to come away with a first guess at the number of kids who are likely going to join us.

There are many good reasons for you to plan to attend. Seeing excited kids learning about aviation ought to be enough, but if it isn't, the Rochester Airport Company and Chapter 100 are going to chip in for a GA family picnic/party. Again, for liability reasons – BYOB. The hope here is to get as many of the local pilots, EAA members or not, to join us for some socializing after the YEs leave. The hope is that over time we will become a better and stronger community of aviators in the local area. Who knows what good things that will lead to? Again, this is for any/all GA pilots and their families.

So... join us if you can for the Young Eagles event. If you can fly, please do the "Youth Protection Program and let me know - the more the better. If you can't fly but want to lend a hand, please do! We'd love to have you. And, if you can only make it for the picnic/party, that's fine too! We'd love to see you!

Plots and at least a couple ground volunteers must accomplish the “Youth Protection Program” training and pass the background check before our rally. This training is available to all YE pilots and volunteers who work with youth, free of charge. Get it at www.eaa.org/youthprotection. The training and background check are good for 3 years and probably won't take more than about 15 minutes of your time. Get this done early! Before the rush. Please forward your Youth Protection approval email to YoungEagles@EAA100.org. See last month's [chapter newsletter](#) for more information.

Chapter Flight Breakfast: This will be June 19th (Father's Day) the weekend after the YE Rally. Not much is changing from years past except the price will be \$7 for adults and \$5 for youth. Click [here](#) for an adobe (.pdf) download of the flyer and post it for advertising.

See the Events area of our <http://EAA100.org> for more planned local aviation events.

Chapter Member Derwin Hammond Receives FAA's Wright Brothers Master Pilot Award. This award is presented to outstanding pilots who have more than 50 years of accident free flying.

Derwin soloed his first aircraft, 65 years ago, in 1951. In 1967, he received his Flight Instructor Certificate. He has been a member of the Civil Air Patrol for over 60 years, achieving the rank of Lt. Col. Derwin has also been a member of the Experimental Aircraft Association since 1994. In addition to his flying, he worked as an FAA Air Traffic Controller for 30 years and is a FAASTeam Safety Representative. He has flown countless aircraft including Pipers, Cessnas, Mooneys, and De Havilland Beavers. If it had wheels, skis, floats, or amphibious landing gear, Derwin has flown it.



L-R: Kevin Morris, Derwin Hammond and Jay Flowers
Kevin and Jay are FAASTeam Program Managers.
The Post Bulletin should have an article on Derwin shortly

Table Transportation: We are still trying to get the table the chapter bought from Ronn DenOuden from Spectrum to Dodge Center. If anyone has a pickup without a topper, please give Ronn a call and set up a time when you both are available.

Why GA Flying is so Fun: by Dick Fechter

Phil asked me to join him May 2nd for a trip in his Glasair to look at a breeding bull in Sauk Center. I try to never turn down these opportunities. It was an hour VFR trip each way on a beautiful day. Luckily, for me, he didn't like what he saw and that evening he did a "bulls for sale" internet search and saw one that looked good in NW Alabama. So the next day we were off again.

This time it was going to be about 600 miles or a 4 hour trip each way (no wind). We couldn't file IFR because I don't have a medical (that's another story) and he's not IFR rated.

We planned to use flight following but RST took us as far as they could see us and then dumped us. I pushed the "Nearest" button and got the MSP Center frequency and requested flight following again and we had it almost the entire rest of the way. We were able to cruise at 5500 MSL until about the last 100 miles when lower clouds forced us lower and below radar range.

The airplane can do 5 hours with more than an hour reserve but sitting that long isn't much fun or comfortable. Besides, we had already flown 2 hours of fuel out of the airplane the previous day. So we picked 3LF, a nice little airport about half-way that had 100LL for \$3.75/gal and free bottles of drinking water. Phil had a little trouble clearing his ears after landing and before the trip was over he had a miserable cold.

The 2nd leg to KMSL was very nice but the clouds were a little lower. The FBO at KMSL was very accommodating and the hotel furnished transportation for an evening of great food and conversation. The prospective bull's owner picked us up in the morning and showed us how beautiful NW Alabama really is – along with some good looking bulls. At least that's what Phil said because I have to really look to see the difference between a steer and a bull.

Our return weather was good for ceiling and visibility, but the winds were very strong and cross to start then stronger and on the nose for the second half. They were also forecast to get stronger with altitude and cause lots of turbulence. We planned to stay low; both because of the winds and to help Phil's sinus problem. The Glasair has a heavy wing loading so the turbulence just causes it to wallow around a lot – not bounce your head off the roof. Plus we sit at the CG which means we don't get slung from side to side. We just pivot in every direction.

I had not used the Bluetooth function of the headset and phone before, but as Phil taxied to the runway, I got a weather update from 1-800-wxbrief. I ended up filing a VFR flight plan and activating it all by a very clear phone connection just before takeoff. It worked great! I wanted the flight plan because we were going to be below most flight following radar. Phil always keeps his avionics subscriptions up to date so we had a good handle on airspace, obstacles and terrain issues – along with 4 eyeballs. I did clip the "remove before flight" streamer on the door handle to remind me to close the flight plan.

After about 1.5 hours Phil was hungry for a hamburger. We were getting close to KMWA, and were just going to go around their airspace, so I asked tower if there was a restaurant on the field – which there was not. Back to the frequency page for Unicom, then asked the FBO if they had a curtesy car – which they did, and it was available. We had a great lunch and took a couple pieces of pie back for the line guys.

When I tried to file the VFR flight plan last leg I discovered I can't file for 1000' AGL – the system just won't take AGL. No problem, filing for 2500 MSL worked fine.

The flexibility and convenience of flying GA can't be beat. To go where we want and when we want is terrific. To try to do these trips any other way would have been work and taken much more than three half days. This was fun. Phil had a mission, but I really didn't care about where we were going. It was more about the enjoyment of the trip.

Passenger Briefings – From Pilot Workshops.com

Let's start at the beginning. FAR 91.107 mandates that no pilot may take off a U.S.-registered civil aircraft unless the pilot in command of that aircraft ensures that each person on board is briefed on how to fasten and unfasten that person's safety belt and, if installed, the shoulder harness.

The Big Picture – If they have never been up before, have them hold onto the shoulder harness during takeoff so they don't instinctively grab something like the yoke. Make sure your passengers are well aware of just what it is they will be doing. Your passengers can be an asset or liability on any flight. Your preflight briefing will directly determine which role they play. Let them know what they can do to help you (i.e. scanning for traffic) and what they can do to hurt you (i.e. distracting you from flying). They should know how long the flight will be and make sure there are no surprises.

Sterile Cockpit - Airline pilots are not allowed extraneous chatter during critical phases of flight and neither should you. Make sure they know exactly when they can talk with you and when not to!

Airsickness - Everyone is capable of feeling uncomfortable during flight, especially newcomers. Provide airsickness bags and make sure your passengers let you know sooner rather than later if they are having problems.

Evacuation - Make sure all passengers know how to evacuate from the aircraft in an emergency. You may be incapacitated and your life could well be in their hands!

Traffic - We operate in a busy aviation system. All sets of eyes are critical. Get your passengers involved with looking outside and calling out other aircraft.

CRM - Good cockpit resource management says that we get everybody in our aircraft involved in conducting safe operations. Let your passengers know their feedback is important and they should not be intimidated about advising you of safety concerns.

Need new “Mug Shot” pictures: Please email me a new GOOD “Mug Shot” picture of yourself. I want to redo our web's [membership picture page](#). I got most of these old pictures from old group pictures and they sure look bad. If you don't see yourself on the Membership page, it is probably because I have not seen you at a meeting in a while. That can be fixed by coming to our fly-in. If you don't have a picture of yourself, you can fix that too – just tell me to take one at the next fly-in.

EAA Partners with FAA, Dynon for STC Breakthrough to Upgrade Safety, Reduce Costs for Aircraft Owners



EAA, in partnership with Dynon Avionics and the FAA, has been awarded a Supplemental Type Certificate (STC) to install Dynon's EFIS-D10A in certain standard category aircraft. This breakthrough STC enables the inexpensive, but very capable, avionics that have served the experimental and light-sport worlds for decades to finally have a pathway into the type-certificated market. The Dynon system is a direct replacement for a vacuum-driven attitude indicator, and the STC currently applies to the Cessna 150, 152, and 172 series and the Piper PA-28 and PA-38 series. More aircraft are expected to be added soon.

EAA worked extensively with the FAA and Dynon to show compliance with regulations and develop a new certification pathway for safety-enhancing equipment. The long track record of the D10A product line and its conformity to a variety of industry standards helped it become the first device accepted by the FAA in this pioneering effort. In addition to Dynon's proven reliability, the unit delivers a wealth of information to the pilot and even has an integrated angle of attack feature (with the installation of an optional probe). EAA installed the D10A in its 1976 Cessna 172M and submitted to a series of flight tests with an FAA test pilot, which went flawlessly.

EAA intends to begin selling the STC as soon as possible, hopefully later this spring, at a nominal price point in line with its existing autofuel STC. In addition to the D10A, more products are actively being explored as EAA is willing to work with other manufacturers to bring down costs and reduce barriers to recreational flying. Stay tuned for more details!

Links:

- [4 Tips for Summer Fly Ins](#) (Avemco)
- [How a Radial Engine Works](#) (from AOPA). Youtube [link](#)
- [Lockheed SR-71 Blackbird Fastest Jet in the World Full Documentary](#). (Chapter member Walt Hallororan's brother Pat played a big part in the program). Here is nother interesting [link](#) on this subject.
- [The Future of Flight](#)

Garmin launches G5 standby instrument, new audio panels

Garmin's new G5 can serve as an all-in-one standby instrument or a compact primary flight display for experimental and light sport aircraft.

The G5 fits into a standard 3-inch instrument hole and has an internal GPS; air data, attitude, and heading reference system (ADAHRS); and an optional backup battery. If the primary instruments fail, the G5 can continuously display attitude, airspeed, altitude, vertical speed, and a slip/skid ball on its 3.5-inch LCD screen. It also can be used to control some Garmin autopilots and provide redundant performance data for display on G3X EFIS screens if the G3X internal ADAHRS fails.

The G5 was developed by Garmin's "Team X," which designs products for experimental and light sport aircraft, and it uses different software than Garmin's other products so that a fault in one system won't corrupt the other.



"Installation is quick and easy and the integration potential is limitless," said Carl Wolf, Garmin vice president of aviation sales and marketing. "We're excited to bring this innovative and safety promoting product to the Experimental and Light Sport market."

The G5 has a retail price of \$1,199 and an optional four-hour backup battery sells for \$150. FAA regulations prohibit non-TSO equipment like the G5 from being installed in standard category aircraft, but legislation now before Congress and backed by AOPA would allow safety-enhancing equipment such as this to be added to general aviation cockpits if approved.



Garmin has introduced a new line of audio panels that allow cellphone conversations through aircraft headsets, high-quality "directional" audio, and simultaneous links to multiple

electronic devices.

The GMA 245 and 245R Bluetooth audio panels are made for experimental and light sport aircraft and allow up to six listeners to connect to as many as three devices.

"You've got to hear it with your own ears to appreciate how rich and clear the sound quality really is," said Jessica Koss, a Garmin spokeswoman. "You can easily differentiate between multiple voices on the radio or intercom and listen to the one you want to hear."

The GMA 245 and 245R (the R is a "remotely" installed version) also allow users to control a Garmin VIRB XE camera through an internal Bluetooth wireless connection. The GMA 245 is rack and pin compatible with Garmin's GMA 240 and 340 audio panels and can be integrated with the G3X and G3X Touch EFIS systems.

The GMA 245R has a retail price of \$1,199 and the GMA 245 sells for \$1,325.

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