



EAA Chapter 100 August 2022 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.

August Picnic Meeting

– Dwayne Hora

Reminders:

Next Chapter meeting is on Sunday, July 14 at 11 am

The 2022 EAA Chapter 100 Picnic will be held on Sunday August 14. Social hour begins at 11am with lunch at noon. Please bring your favorite folding chair for better comfort.

We will be providing a fried chicken dinner including corn, mashed potatoes with gravy and a dinner roll. Of course, can't forget the root beer float!

We still do not have all the numbers from the pancake breakfast. More to follow on this subject after we collect all the bills.

Thank you to everyone that helped with the pancake breakfast. Please enjoy the picnic as a token of appreciation.

Dwayne Hora
EAA Chapter 100
President

Reminder:

A Celebration of Life service will be held 11 a.m. Friday, August 12 with a visitation at 10 a.m. at Christ Lutheran Church in Byron, MN with eventual burial in St. Francis de Sales Cemetery in Ossian, IA. In lieu of flowers, memorials are preferred to Rochester Seasons Hospice.



A Note from the Treasurer

-- Chris Budahn

Editor: Chris has been very busy lately. He was going to submit information but did not get a chance before the Newsletter needed to be published..

If you are paying dues, please send \$10.00 along with your EAA number and e-mail address to:

Chris Budahn
6525 County 30 BLVD
Kenyon, MN 55946

HOW DOES DENSITY ALTITUDE AFFECT FLIGHT?

-- Hartzell Propellor

Editor: This article is from Hartzell Propellor. For the complete article please see <https://hartzellprop.com/how-does-density-altitude-affect-flight/>

Density altitude is something that all pilots should understand, especially when flying in warm, summer weather. But unfortunately, experienced pilots sometimes become complacent and neglect to consider the importance of density altitude when preflight planning. Failing to carefully calculate anticipated takeoff, climb, and landing performance in high density altitude conditions can result in dangerous accidents. For a quick refresher, let's take a closer look at what density altitude is and how it affects aircraft performance.

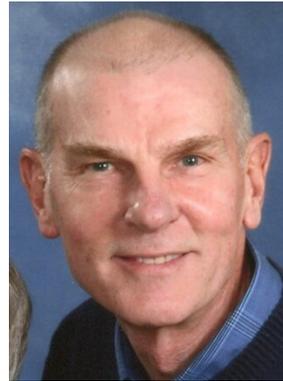
What is density altitude?

According to the [FAA's Pilot's Handbook of Aeronautical Knowledge](#), density altitude is defined as pressure altitude corrected for variations from standard temperature. When conditions are standard, pressure altitude and density altitude are the same. But when nonstand-

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Lt. Col. Richard 'Dick' Fechter

-- POST BULLETIN



Editor: This Obituary is a repeat from the July Newsletter. In aviation terminology, Lt. Col. Richard "Dick" Fechter has "Gone West".

Lt. Col. Richard "Dick" Fechter (Retired IA ANG) died Tuesday, June 14, 2022, after an eight-year battle with GIST cancer. His wife, son, and daughter were by his side in the Seasons Hospice Home in Rochester, MN.

Dick was born in Hartley, IA on July 29, 1947, to Lambert and Margaret Fechter. After his father's death in 1959, the family moved to Lakefield, MN. Following in his mother's and father's footsteps, Dick earned his pilot's certificate at the age of 16. After graduating from Lakefield High School in 1965, he earned a business degree from Morningside College in Sioux City, IA.

In 1969, he married his high school sweetheart, Patricia Nasby. That year, Dick began Air Force Pilot Training for the 185th Fighter Wing. He graduated first in his class. In 1972, he and Pat moved to Omaha, NE, where their two children were born. In 1976, he accepted a position as a full-time fighter pilot with the Sioux City Air National Guard. Over the next 35 years, he logged over 3,700 hours in the F-100, A-7, and F-16. In 1990, he graduated from the Industrial College of the Armed Forces in Washington D.C.

After retirement, Dick and Pat moved to Byron, MN. Through the Rochester Experimental Aircraft Association, he continued flying. There he met Pete Smith and Phil Conway. He assisted with the assembly of Phil's homebuilt kit, and completed all flight testing of his Glasair II. Dick's greatest joy was taking his four grandchildren and other EAA Young Eagles for plane rides. Over the last nine years, Dick logged over 600 hours in that Glasair.

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Secretary Comments

-- Jeff Hanson

EAA Chapter 100

Chapter 100 meetings

Here are the minutes from the July meeting:

- 11 members were present.
- There were 2 fly-ins.
- Pancake breakfast discussion - recap.
- Ford Tri-Motor event discussion.
- The weather was great for flying and the perfect morning for a fly-in meeting. Afterwards, John and I went for a nice long round about flight back to RST. Summer is going by fast with only a couple fly-in Saturday meetings left. It would be nice to get a few more airplanes there. What better reason to get out than good aviation fellowship and a doughnut?

Respectfully submitted,

Jeff Hanson

Chapter Secretary



(Continued from page 2) - Lt. Col. Richard 'Dick' Fetcher

His cousin, Steve Spang, was like a brother to him. They shared a passion for flying. Together they flew many hours in Steve's planes, which included volunteering for Angel Flights all over the Midwest. Each summer they looked forward to attending the EAA AirVenture in Oshkosh, WI.

Dick closed out his flight logbook this year with over 6,400 hours and a lifetime of memories.

Dick is survived by his wife of 53 years; his children, Thomas (Gina) Fetcher of Oakton, VA and Jane (Craig) Erickson of Byron, MN; his four grandchildren, Isabelle Erickson, Nathan Erickson, Aidan Fetcher, and Katie Fetcher; his siblings, Linda Doman of Mendota Heights, MN, Janet (Scott) Otis of West Des Moines, IA, Laura (Joe) Gagnon of Tampa, FL, Deanne Bauserman of Osage, IA, and David (Cathy) Jochims of Sioux Falls, SD; his sister-in-law, Barbara Nasby of Decorah, IA; brother-in-law, Robert (Karin) Nasby of Missoula, MT; and his aunt, Gladys Sauer of Spirit Lake, IA. He is also survived by many nieces, nephews and cousins.

Preceding him in death were his parents, Lambert Fetcher and Margaret Fetcher Jochims Klingsporn; stepfathers, Arlo Jochims and Blaine Klingsporn; brothers-in-law, Patrick Doman and Scott Bauserman; and his in-laws, Helge and Isabelle Nasby.

It was Dick's wish to donate his body to Mayo Clinic.

A Celebration of Life service will be held 11 a.m. Friday, August 12 with a visitation at 10 a.m. at Christ Lutheran Church in Byron, MN with eventual burial in St. Francis de Sales Cemetery in Ossian, IA. In lieu of flowers, memorials are preferred to Rochester Seasons Hospice.

Editor: Dick's obituary is copied from the [POST BULLETIN](#). It was published June 23, 2022 02:43 PM.

(Continued from page 2) - How Does Density Altitude Affect Flight

ard conditions are present, including high altitude, high humidity, and high temperatures, air density decreases and density altitude increases. Density altitude is an indicator of aircraft performance and should be calculated before any flight.

Density altitude and aircraft performance

Why is knowing density altitude important? Because high density altitude has a detrimental impact on aircraft performance. It reduces lift and impairs propeller efficiency, reducing thrust as a result. High density altitude can also decrease the engine's power output. If it's not accounted for, increased density altitude can cause major problems during takeoff and landing. As the [FAA](#) puts it, "hot, high, and humid weather conditions can cause a routine takeoff or landing to become an accident in less time than it takes to tell about it."

Flying in high density altitude conditions

Pilots should exercise caution when preflight planning on hot and humid days and adjust for decreased density altitude to avoid accidents during takeoff or landing. Likewise, at airports in higher elevations, such as those in mountainous regions, the high altitude combined with high temperatures can make flying extremely hazardous. Even at airports in lower elevations, unusually hot and humid days can increase density altitude and make safe operations difficult. For pilots, high density altitude results in increased takeoff distance, reduced rate of climb, and increased landing roll distance. Failure to plan for these adjustments can result in an accident.

Because it has such a negative effect on takeoff and climb performance and landing distance, it's important for pilots to always [calculate density altitude](#) and check aircraft performance charts during preflight. Density altitude can be calculated using an E6B computer or an iPad app, but it's always good to remember the [formula for density altitude](#) in case your equipment malfunctions. Especially when flying in high density altitude areas, such as high-elevation, mountainous areas, or extremely hot regions, calculate takeoff distance carefully and know your aircraft's performance limits.

Anticipate slower acceleration down the runway and a reduced rate of climb. [AOPA](#) recommends having 80 percent of your takeoff speed at the runway's halfway point, or abort the takeoff. It's also recommended to fly in the evening or early in the morning, when temperatures are typically lower.

Finally, when facing high density altitude conditions, be sure the aircraft's weight is below 90 percent of maximum gross weight. To keep weight in check, don't fill the fuel tanks to the top. This may require flying shorter legs and making extra fuel stops. Knowing how your aircraft will perform and being willing to have flexibility on departure time, weight, and fuel can prevent surprises during takeoff, climb, or landing.

Building an Ultralight Aircraft: Get Yourself Prepared!

-- *Ultralight-Airplanes*

Editor: This article is from [URL: https://ultralight-airplanes.info/Building-an-Ultralight-Aircraft%5E%5E%5E%5E-Get-Yourself-Prepared!.html](https://ultralight-airplanes.info/Building-an-Ultralight-Aircraft%5E%5E%5E%5E-Get-Yourself-Prepared!.html)

Are you ready or not so sure? Begin with understanding of what you want to do and how you want to go about it. Most people build the ultralight aircraft they have been already flying. It is something they are familiar with and have a fair understanding of the different parts of the airplane.

Purchasing construction plans

The first step in the preparation for aircraft building, therefore, will begin with purchasing or acquiring aircraft construction plans. The plans must contain complete details of all the different parts, materials, tools, drawings and instructions on how to build the aircraft. If the drawings are full size, you will be able to save time and avoid problems that arise from inaccurate scaling up operations. A complete list of materials and sources for the same will help you cut out the time and expense

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Newsletter Editor

-- Art Howard

Another AirVenture, Oshkosh, Wisconsin is over. I spent two weeks in a sleeping bag at night and volunteering during the day as Chairman of South 40 Aircraft Camping and Registration. I do not have the final number yet, but registration revenue at the South 40 was up approximately 18% on Saturday, July 30 over 2021 numbers. I also heard that the overall attendance numbers were also up.

Monday morning we still had five airplanes parked on the South 40. Four had tents still set up. It looked like pilots stayed longer this year. We had a thunderstorm Saturday evening, July 23. This weather seemed to keep planes away for Saturday and on Sunday they just kept coming. The Fisk Arrival was crowded and stretched almost to Madison. I have never seen so many planes on the arriving line. I got a message on my phone stating "OSH/FISK is saturated with traffic. The final begins 25 miles south of Portage, WI. Suggest alternative."

However, no aircraft were turned away this year. The South 40 had a few spots left. There was also a new area to the south of the Ultralights and west of the current South 40 that looked like it could be used for aircraft parking. In other words, the AirVenture grounds keep expanding to accommodate more aircraft parking and camping. I am sure we will see changes again next year.



My Cherokee with the tent in the background set up on the Monday a week before AirVenture started. I had to

arrive early in order to get the South 40 Aircraft Camping and Registration up and running. I gained two new volunteers this year and it I may have another volunteer for next year.

It is great to be back home again.

In case you did not get the news: Former Experimental Aircraft Association President Tom Poberezny died July 25, 2022, the opening day of the 69th annual EAA AirVenture Oshkosh. He was 75.

I saw Tom fly in the Red Devils and the Christian Eagles Team. These aircraft are now in the EAA museum, Oshkosh, WI. Two of their pilots have now "gone west". Makes me feel old. But, I am still enjoying life. Flying my Cherokee is still a great pleasure.

Please send articles and pictures to me at alhow-ar@attglobal.net. See you around the patch.

(Continued from page 4) - Building an Ultralight Aircraft: Get Yourself Prepared!

of scouting around for the different parts you need for your plane.

If the company that sells the construction plans will also sell you an aircraft kit, you have got a winner for yourself (unless you really want to build from the scratch). If the instructions are detailed as they should be, you will have no difficulty in assembling the different parts. So you need to focus on the different construction plans available in the market and pick the one that suits you best. You will have to set about acquiring the different parts you need for assembling your plane.

Read more about [building an ultralight airplane with construction plans](#).

Using Partial Kits? Why not!

If you feel that you need some expertise before investing large sums of money in building your aircraft you could take advantage of using the partial trial kits offered by some companies. The partial trial kit will focus on parts of the plane. For instance, you could buy a tail kit and assemble it. If you decide not to build the plane

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you can put up the tail for sale, or else you can go ahead and order the rest of the kit. The trail kits also come with an offer of on-phone help. You can call up the company for help and guidance as you go along.

Once you are done with acquiring the basic components, you will need to focus on getting yourself the necessary tools. Some building kits come with the tools, but not all of them. You need very simple tools you use for everyday things. If you have purchased a kit it will contain a table top drill press, metal cutting band saw (or hacksaw), various hand files, a dremel belt sander, hand drill, prop rivet gun and a table to build things on. You will also need a one inch tubing bender.

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Editor: The airspace depicted below shows where you need ADS-B out. There is a lot of airspace where you **do not need** ADS-B out, including **KRGK**. ([FAA](#)). You can get authorization to fly into the Minneapolis airspace with this tool: [ADS-B Deviation Authorization Preflight Tool](#)

EAA Young Eagles Pilot Requirements

-- EAA

Editor: This is from the EAA Young Eagles **Pilot Guidelines** brochure: **Pilot Requirements**

The Young Eagles pilot requirements are basic, but **MUST** be followed.

- ◆ Be a current EAA® member and hold an appropriate airman’s certificate (sport pilot or greater)
- ◆ Possess a current medical certificate (if applicable)
- ◆ Be current to carry passengers in the aircraft you plan to use
- ◆ Have a current flight review
- ◆ Complete the Young Eagles registration form before the flight, including parent or legal guardian signature, and pilot signature
- ◆ Conduct flights in an aircraft that is in airworthy condition
- ◆ Have aircraft passenger liability insurance for the aircraft used (owned, rented, or borrowed)
- ◆ Adhere to all applicable Federal Air Rules (FARs)
- ◆ Complete both the online training and basic background check as a part of EAA’s Youth Protection Policy. For more information, visit EAA.org/YouthProtection.

Editor: Make sure you are current to fly Young Eagles at the EAA Chapter 100 Young Eagles events.

