

HIAWATHA VALLEY EAA CHAPTER 1518**RGK—Red Wing, MN Regional Airport***(Formerly the Hiawatha Valley Pilots Association - founded in 1973)***Our 49th Year****Chapter Leaders**

President

Scott Stricker

Scott.stricker@ecolab.com

Vice President

Mark Weinreich

mnweinreich@gmail.com

Secretary

Mark Weinreich

mnweinreich@gmail.com

Treasurer

Dan Johnson

DanJohnsonMRWI@gmail.com

Web Editor

Rex Porter

rexporter00@gmail.com

Newsletter Editor

Art Howard

alhowar@attglobal.net

Technical Counselor

Open

Flight Advisor

Open

Young Eagles Chairperson

Dan Johnson

Eagle Flight Leader

Scott Stricker

Chapter Historian

Dennis Ahern

EAA Chapter 1518 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.

This publication by EAA Chapter 1518, Inc. is for the use, education and occasional enjoyment of its members and others. No claim is made for the accuracy or applicability of information herein. Editorial content is the opinion of the contributor not necessarily the position of either EAA Chapter 1518 or the Experimental Aircraft Association.

Reader submissions and comments are strongly encouraged.

Comments from our Chapter President

-- Scott Stricker

Good Morning 1518,

I am late in getting this turned in to Art for the newsletter. Art, I apologize for my tardiness. It wasn't intentional, or me being lazy. Truly it was not. I was working to get a deal wrapped up that I can announce to the chapter. More on that later in the column.

This past Sunday was Father's Day. For all of you fathers out there, Happy Belated Father's day. I hope you got to spend it with those who love you the most. That morning I jumped into the Glasair early and flew to Dodge Centers pancake breakfast. I had thought about washing the plane first as it had quite a few bugs on it from the previous day of flying young eagles.

We had 22 registered, but two were duplicates and ended up flying 14 who showed up. It was a good day. Weather was great, kids were great, and the operation ran smooth. Paul Steger had put an article into the local Prescott paper a couple weeks back and according to Dan Johnson if we had 40 spots open, we could have filled them. Hearing this brought a big smile to my face. Its to easy to get wrapped up in the doom and gloom of todays world. Knowing that there is still a strong interest in general aviation is near and dear to my heart. Taking kids flying is something that I truly enjoy. I flew three Saturday morning. All 3 were first timers in GA airplanes. All 3 of them were brought to the airport by their mom. I was not and still am not sure who was more excited, the kids or mom! Mine were from Rochester, Anoka, and Ellsworth if I recall correctly. Thank you to the pilots who flew and the ground crew for making the day a success.

Ok, back to the Father's Day fly in breakfast. I landed at Dodge Center and taxied back to the marshaller who turned me down the grass runway. Glad I didn't wash the plane, yet I thought! After a very long, slow taxi in the Glasair to the parking area I was rewarded with being the first plane to fly in that morning. I walked into the EAA hangar, yes, they have a dedicated EAA hang-

Calendar .

- Next meeting is Saturday, July 2, 2022 at 9:30 am
- 1st Saturday meetings at the terminal at 9:30am
- July 15h at 1pm we are set to tour the Minnesota State Patrol Flight wing at KSTP
- YE Rallies
 - ◊ Open rallies 7/23, & 8/20

(Continued on page 2)

Secretary Comments

-- Mark Weinreich

Secretary's Comments:

Meeting of June 4th, 2022

No meeting was held. There was a fly-out to Oshkosh to see the EAA Museum.

by Mark Weinreich

(Continued from page 1) - Comments from our Chapter President

ar!! Hint Hint!! Who to my surprise do I see, none other than our very own Art Howard. Art has been a member of the Dodge Center chapter since 1975 he stated. It was great to see a friendly familiar face behind the grill. After a wonderful breakfast and discussion, it was time to depart as the day had other adventures planned.

The more I talk to Art the more I am impressed on who he is. Art is a true gentlemen's gentlemen. Art is the face of what EAA is all about. Art is one of the few people in my years on earth that I am truly honored to say I know him. Thank you, Art for all you do for our chapter and others.

Ok, now to get back to my announcement. I have another field trip opportunity for our chapter. July 15th at 1pm we are set to tour the Minnesota State Patrol Hangar at Holman Field. My brother and nephew are both MN Troopers and my nephew works as a FLIR camera operator for the flight wing when he is not in his traditional squad car. It has taken a while to convince the State of MN to let a bunch of us questionable characters into the hangar to get a behind the scenes look at the flight wing. I hope everyone can join us; it will be a great afternoon. It would be great to fly up to KSTP and grab lunch at Holman's Table either before or after the tour.

See you soon around the airport!

Scott Stricker

The "Days of the Drones" are near...

-- Mark Weinreich



FAA stats: 854,694 registered drones

529,820 recreational

321,370 commercial

3,504 pending

271,356 remote pilots certified as of

April 5th, 2022, per FAA website info..

Actual number of drones in US possibly approaching two million...

Worldwide: 5 million, 10 million by 2030?

Aerial drone sector approximately \$15 billion in 2020; expected to grow to 280 billion by 2032.. So we might have to get over "hating drones" because they apparently are to become more than a "nuisance." I perhaps raised an eyebrow or two when advocating for advanced aerial delivery systems in the article which was recently published in the Red Wing Republican Eagle newspaper concerning such. Being a lifelong pilot and retired airline pilot, I recognize the concern about having these things bussing all over like an outbreak of boxelder bugs...The bugs can be sprayed; but the drones are to be "stayed," because they are efficient

(Continued on page 3)

HEAT + HUMIDITY = TROUBLE

-- AVEMCO

It's time to recall some of the things you learned in ground school but haven't thought about for a while—at least not since last summer. You remember the old memory shortcut about “high, hot, and heavy” degrading performance. “Heavy” is obvious. And while we all know that our aircraft don't perform as well at high altitudes and hot temperatures, it's important to understand why not.

If you've walked across a hot parking lot, you know it's even hotter on the pavement. Paved surfaces, especially black asphalt, absorb the sun's rays and make the air above them even hotter. Of course, this happens on runways too.

Runway temperatures can be as much as 40°F hotter than what the AWOS or ATIS says on a sunny summer day. Plan for that and adjust your takeoff distance calculations appropriately. You might want to get the temperature from your airplane's Outside Air Temperature gauge in addition to the AWOS or ATIS to use on your takeoff performance chart.

When we're talking about “high altitude,” it's density altitude that we're talking about. At high altitudes, the air is less dense because heat expands things. The hotter the air, the less dense it becomes. As you know, wings generate lift by interacting with air, and engines develop power by combining fuel with air. Then propellers turn power into thrust by reacting with the air. Anything that reduces the density of air will reduce the airplane's performance. Hence, “high” and “hot.”

But what about humidity? Though it might seem counterintuitive, air loaded up with water vapor is lighter than dry air. According to the FAA's *Pilot's Handbook of Aeronautical Knowledge*¹:

“The small amount of water vapor suspended in the atmosphere may be almost negligible under certain conditions, but in other conditions, humidity may become an important factor in the performance of an air-

(Continued on page 4)

(Continued from page 2) - The “Days of the Drones” are near...

and capable, are very easily employed, and can be integrated into many roles such as emergency relief, police surveillance, fire-fighting, agricultural crop and animal monitoring, engineering and mining applications, and many others, not the least of which may be to deliver your pizza in the evening after a long day of dispatching aerial delivery orders for various and important industrial clients.

Part 107 of CFR14 will become necessary reading and study for the “aviators of the future.” I am perhaps willing to say that I have been reluctant to acknowledge this; however I intend to study and go for my drone license..? After getting my first sign-off in 1973, then through many more certificates and endorsements. Private, instrument, complex, tail-wheel, Commercial, rotorcraft, multi-engine, ATP, seaplane, A&P, IA, I am still good for at least one more.

I was challenged as to my statement that “airports will become the staging area for autonomous aerial delivery systems” as this was reported in the news article. Look at it this way: This technology is certain to be highly regulated; then it makes sense to consider that it be mostly employed from established airport sites which can

(Continued on page 4)

Fly-in Event Websites

-- Art Howard

The following are websites to use to look for fly-in activities:

<https://www.dot.state.mn.us/aero/events/flyins-and-events.html>

<https://wisconsindot.gov/Pages/doing-business/aeronautics/trng-evnts/flyins.aspx>

<http://www.moonlightflight.com/flysocial/socials/WI/socials.html>

If you know of any others, please send the link to me at:

alhowar@attglobal.net

(Continued from page 3) - Heat + Humidity = Trouble

craft. Water vapor is lighter than air; consequently, moist air is lighter than dry air. Therefore, as the water content of the air increases, the air becomes less dense, increasing density altitude and decreasing performance. It is lightest or least dense when, in a given set of conditions, it contains the maximum amount of water vapor..." Then, we add heat to the equation. "...As temperature increases, the air can hold greater amounts of water vapor. When comparing two separate air masses, the first warm and moist (both qualities tending to lighten the air) and the second cold and dry (both qualities making it heavier), the first necessarily must be less dense than the second. Pressure, temperature, and humidity have a great influence on airplane performance, because of their effect upon density.

Take a look at the performance section of your POH. If the humidity is high — say, above 50 or 60% — it may be wise to add additional length to the runway requirements over what the takeoff performance chart says to account for moist air. You might also want to plan for a decreased rate of climb, especially if you have to clear an obstacle.

The NTSB files are full of accidents caused by pilots who didn't take heat and humidity, let alone altitude, into account before blasting down a runway

To make sure you don't become one of them, please spend a few minutes in the books accounting for takeoff performance loss next time you fly.

¹ *The Pilot's Handbook of Aeronautical Knowledge* 2016. Published by the FAA and currently located at https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/

Editor: The original AVEMCO article is here: <https://www.avemco.com/news-events/pirep-blog/humidity-plus-heat-equals-trouble?partner=PBLG>

(Continued from page 3) - The "Days of the Drones" are near...

then map out and dictate arrival and departure routes for not just commercial airline flights, but also aerial delivery systems flights. The routing and control of such could be possibly perpendicular to the arrival/departure tracks of airliners and at such altitudes as to not interfere with operations such as go-arounds.

I have been particularly impressed at the deployment and usage of autonomous aerial drones in the remote areas of Africa, which have been employed in medical services roles. Medical providers in these remote areas hack out a "landing area" and put in a call on the satellite phone for assistance. The relief drone is soon sited just over there...Of course, they perhaps don't worry too much about the airline traffic just then...

Cpt Mark

April 2022

Editor: If you look at a ForeFlight sectional you will see a ZMP AIRSPACE WITH AN AREA DEFINED AS 2NM RADIUS OF 443240N0923609W (5.8 NM SW RGK) SFC-300FT AGL Daily 1200-2300

2206071200-2206302330

NOTAM ID: 06/046 (KZMP)

There are numerous other test sites in Minnesota.



Zenith Aircraft CH601 experimental homebuilt lightsport aircraft

Editor: https://www.lightsportaircraftpilot.com/zenith_ch601_experimental_aircraft/index.html

Newsletter Editor

-- Art Howard

I am not one to "toot" my own horn. However I was discovered standing over a hot grill making scrambled eggs by none other than Scott Stricker, EAA Chapter 1518 President, who flew into the EAA Chapter 100 Father's Day Pancake Breakfast at Dodge Center Airport (KTOB) on Sunday, June 19, 2022. Scott says "What are you doing here?" and I had to come clean.

I have been a member of EAA Chapter 100 since 1975 when I move from Illinois to Stewartville, Minnesota. Prior to that I was a member of EAA Chapter 22 in Rockford, Illinois, the chapter that started the Aircraft Raffle that was taken over by EAA National.

So the reason I was not at the EAA Chapter 1518 Young Eagle Rally on Saturday, June 18, I was helping set up the hangar and grills for EAA Chapter 100. Yes, I am a member of both EAA Chapter 100 and EAA Chapter 1518. Just got to love people and airplanes!

I do a newsletter for both Chapters. I also do a newsletter for another organization WRCC (Waterway Radio and Cruising Club). This is a group of folks that are amateur radio operators and also have been cruising on the water with either a power boat or sailboat. Some have quit cruising on the water and purchased a motorhome and do land cruising. They are all amateur radio operators. I joined this organization back in the days when we were cruising the Caribbean, Bahamas, and the East Coast of the USA as far north as Chesapeake Bay and Baltimore and as far south as Guatemala in the western Caribbean. We had multiple trips to Mexico. We also cruised the eastern Caribbean so have been to The British Virgin Islands and the American Virgin Islands by sailboat. We sailed down the eastern chain of Islands as far as Trinidad and Tobago. If these places are not known to you, it may be time to get out a world atlas and take a geography lesson! I know I learned a lot! Great open water sailing on the ocean and lots of great memories, both at sea and landfalls.

Scott, EAA Chapter 100 is called the Rochester Century Chapter, part because it was formed in Rochester and

(Continued on page 6)

EAA Chapter 1518 Dues

-- Dan Johnson

Fellow EAA Chapter 1518 Members

Just a friendly reminder that not all have paid their dues.

To become an active member of chapter 1518 the following is required:

1. You are a member of EAA and have paid your dues to the national organization.
2. You have paid your Chapter Dues of \$10 per year.

Contact Dan Johnson or Art Howard and they can look up if you are current on your local and national dues.

If you need to pay chapter dues give them to Dan or Art and we will update the records.

Editor: You can also mail your dues to:

Dan Johnson
751 Briarwood Dr
Red Wing MN 55066

Dave Matheny Illustrations

-- Scott Stricker

Hi Scott,

Since you're going to the EAA museum, I thought I'd pass on a bit of information to the Red Wing pilots who knew Dave: I am donating a large portion of Dave's original illustrations to the EAA museum. The curator came here a couple of weeks ago, and I think he was blown away by the quality and quantity of Dave's work. We had been thinking of a display there during this year's airshow, but he thinks that the gallery that is available this year is too small, and I agree. So there will be a large display of Dave's work during next year's AirVenture.

Regards,

Jean Matheny

Editor: E-mail above received by Scott Stricker before the flyout to Oshkosh, Saturday, June 4, 2022.

(Continued from page 5) - Newsletter Editor

part because it is 100. We used to meet in members homes who were building aircraft. When there were less homes to meet in, we went to Dodge Center to meet in the Administration Building. Rochester Airport was just not as friendly as we would have liked.

Members contributed and loaned money to EAA Chapter 100 to purchase a hangar which we rent for members putting a project together. We also rent to aircraft owners so the hangar has a budget that is always positive. It also holds all the benches, tables, grills, and other items needed to hold an annual Father's Day Breakfast.

So now you know the rest of the story.

This newsletter comes from Beaver Island, MI. We flew into Beaver Island airport (KSJX) on Tuesday, June 21.

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

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](http://www.faa.gov)). You can get authorization to fly into the Minneapolis airspace with this tool: [ADS-B Deviation Authorization Preflight Tool](https://www.faa.gov/ats/adsb/deviation)

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/Youth Protection](https://www.eaa.org/YouthProtection).

Editor: Make sure you are current to fly Young Eagles at the EAA Chapter 1518 Young Eagles events.

