

Frostbitten Flyer

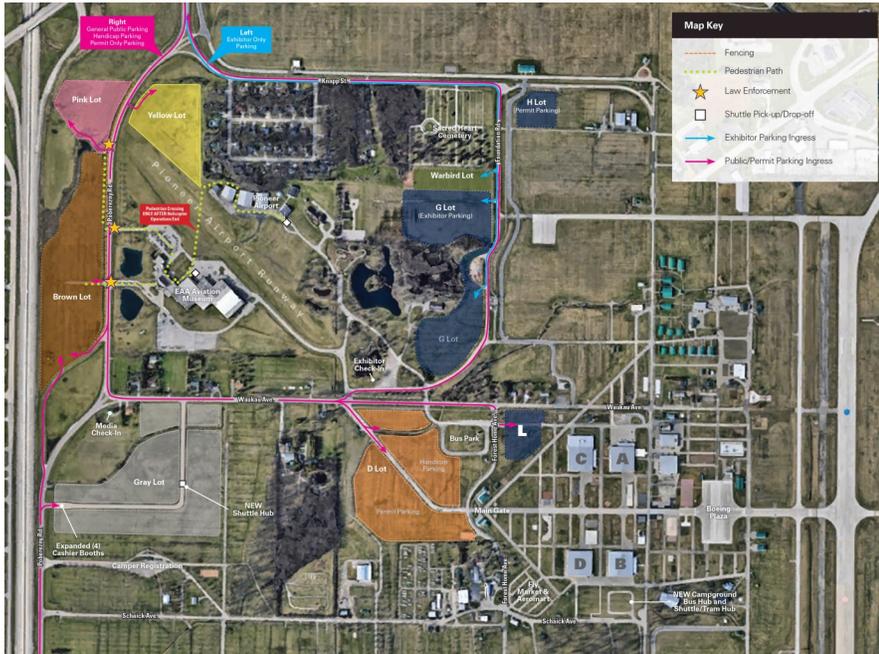
EAA Chapter 850

Lake Superior Chapter

March 2020

North Central U.P. of Michigan

Site Upgrades to AirVenture 2020



Public Parking Lot Changes

All public parking lots (Brown, Gray, Yellow, Pink) are accessible from Poberezny Road, and will be staffed and open at 6 a.m. Those who park in the Gray Lot can use the shuttle bus from the newly expanded Gray Lot shuttle hub. Those parking in the Brown and Pink Lots will use the shuttle available immediately behind the EAA Aviation Museum, while those in Yellow Lot can access the shuttle via the pedestrian path behind the Pioneer Airport hangars near KidVenture.

There is a new Gray Lot hard-surfaced entrance off Poberezny Road, with an expanded parking payment area and a new bus pickup/turnaround site. We encourage use of Exit 113 (Highway 26) and northbound Poberezny Road for faster access to the Gray Lot.

Tram Routing Changes

The BLUE Route (southern route to vintage and ultralight) will operate on Wittman Road and Vern Avenue (past Theater in the Woods). Its new turnaround will be south of Exhibit Hangar B, in a new pickup/dropoff area that gives easy access to Camp Scholler residents (see below).

The YELLOW Route will pick up at the new intersection with the Blue Route and travel between the exhibit hangars, then turn east to stop at the familiar tram stop north of Hangar A.

The RED Route will depart from the usual Hangar A tram stop and go north on Knapp Street to the North 40 entrance.

A new PURPLE Route will run the loop through Homebuilt Aircraft Camping along the airport service road, from Gallatin Ave. near Aviation Gateway Park to the North 40 entrance. This route will operate ONLY during high-demand times (8-11 a.m. and 3-7 p.m.).

See more info and better photos [here](#)



Up-Coming Events

Saturday March 21st - 10:00am (EDT) Chapter meeting at the Boreal Aviation conference room

Words From Fred

Ted is in Florida soaking up the sun. Fred Benzie has volunteered to fill in this month.

In the 36 years that I have been part of the aviation community, I can't remember such a time of optimism and growth for local sport aviation. We have our new IAC Chapter 134, called the, "Yoooper Loopers". Several members are planning to train for judging school and there are plans to have another aerobatics practice event on May 15-17th. A contest in 2020 is a possibility. Remember that you don't have to fly aerobatics to enjoy participating in this sport. Meeting some of the pilots and listening to the judges is a fascinating new experience for many of us. Membership is free for the first year. Let's all try to attend these meetings and support the new IAC Chapter. The meetings are held at the same location and at the conclusion of our regularly scheduled Chapter 850 meetings.

May 16th is scheduled to be EAA Adult "Flying Start Day". There has never been a better time to begin flight training with the Marquette County Flying Club having 3 airplanes, multiple instructors, ground school classes and multiple flight instructors available. We all know someone who has an interest in learning to fly and all we need to do is ask people if they would like to learn to fly. We need to mentor these adults and will have the opportunity to give introductory flights on May 16th.

We didn't have as robust a year flying Young Eagles in 2019 mostly due to poor weather at Sawyer and Ford Airports. Although I don't believe we have confirmed a date for the Young Eagle day for Sawyer, Ford Airport Day has been scheduled for September 19, 2020. EAA Chapter 439 puts on an outstanding Ford Airport Day and I encourage you all to fly down or hop in a member's plane and help our neighbors. They will feed you, treat you well and you will have a rewarding experience.

The Ray Aviation Scholarship Program is the first of its kind and both IAC Chapter 134 and EAA Chapter 850 have made applications to obtain \$10,000 each for flight training and mentoring future pilots with the goal of a 90% completion rate.

Greg Durand has worked with MSHS teacher Steve Solenski to create the MSHA Aviation Club. Roger Bentlage and I have been assisting when we can but there is always room for more mentors. They have been meeting on Wednesdays at 2:30 pm. All you have to do is check in the main high school office and find your way to the Aviation Club Room. Although the schools will now be closed for three weeks, check with Greg next month to see how you can help. There is a flight simulator, RC building and flying, and all forms of aviation talk.

Lastly, there has already been interest in the camping experience of AirVenture 2020. Just like offering a flight experience, we need to encourage more members to come, camp and experience all that AirVenture has to offer. This year's AirVenture is July 20 – 26th. If you are interested in camping at AirVenture, just ask one of our members who always go annually.

Fred

Editor's Notes

Will Kroeger

906-241-9070

wkroeger@alphaComm.net

Automation Overreliance

My airplane is in for it's annual and some updating. It is getting a Garmin GNC 355 (GPS/COM) and GFC 500 (Autopilot). These two devices will tie into my 2 G5s. I am not happy about the cost of this upgrade but am excited about the new capabilities it will provide. These upgrades have also motivated me to get back into IFR flying.

All I have to do now is figure out how to use all this new automation. So where do you go? YouTube of course! Ok, not really, but You Tube does offer a place to start to see how other people use these devices. Also, I am a better visual learner then reading learner. However, a problem I ran into was that the GNC 355 is so new (August) that there aren't very many videos. In fact, most of the videos are centered on the pilot where they are talking about the 355 but are not showing the button pushing.

I did find people talking about how the 355 operates like the GNS 430W but without all the knob turning and the 355 does not have NAV. So, I looked for videos on the 430W and hit paydirt with a very detailed video output by a Garmin representative. This video taught me enough to start using the Garmin GPS Trainer App to play with it's 355 display. So now I have a User's manual and an App that lets me play with the 355. Note: It did not dawn on me to check for videos on the GPS 175, the GNC 355 without a radio, which came out last Spring.

The next adventure was trying to find help on learning the Garmin GFC 500 autopilot. I thought for sure there would be many videos on You tube since the 500 came out two years ago. I did find a Sporty video, but even though the Garmin presenter covered the basic functions of each button and showed the interaction between it and the G5s, he did not go into much detail on how to operationally use it. He did have some text slides on functional procedures, but once again, I am a better visual learner.

Some good news, I did manage to find a video of a very good CFI giving instruction on the GFC 500. The CFI had some good quotes like "Automation is less safe if you do not know how to use it"; "having mode confusion because you do not know what it does" & "learn to use it progressively".

I plan on getting comfortable with these new avionics before flying by seeing enough videos, reading & understanding the User's Guides and Manuals, and practicing with any Apps. Also, a lot of flying practice in VFR conditions before any IFR flights is a must.

So, why was this article titled "Automation Overreliance"? Because the FAA Aviation Safety Team just sent out an email titled "Don't Let Automation Take Over" which references their Fly Safe Fact sheet "[CFIT/Automation Overreliance](#)" and a FAA Safety Briefing Feature Story titled "[No Surprises! Keeping Control of Avionics and Automation](#)".

Here are some tips from the fact sheet for a successful human/ automation relationship:

- Understand how your automation works and how it behaves when it isn't working.
- Understand where your automation is getting its information and how it will respond if that info is missing or flawed.
- Know all the ways to quickly disconnect your automation and revert to hand flying.
- Practice hand flying regularly to keep your skill and confidence levels high — sims work well too.
- Commit to regular proficiency training like the FAA WINGS Pilot Proficiency Training.

EAA Webinars

Register at: [Webinars](#)

3/17/20	7 p.m. CDT	How to Read and Call an Aerobatic Sequence*	Jim Bourke
3/18/20	7 p.m. CDT	ATC and You: Communicating With Confidence and Clarity* ^{Kennington and Obama}	
3/24/20	7 p.m. CDT	Chapter Chat: Donations and Contributions to Chapters	Patti Arthur
3/25/20	7 p.m. CDT	Medical Certification Q&A*	Charpentier and Dr. Leonard
4/1/20	7 p.m. CDT	Cylinder Work: Risky Business**	Mike Busch
4/8/20	7 p.m. CDT	You Just Got Your Pilot Certificate — Now What?*	Jim Bourke and Marianne Fox
4/15/20	7 p.m. CDT	Healthy Pilot Technology*	Phil Lightstone
4/21/20	7 p.m. CDT	Coaches and Camps for Aerobatic Competition*	Johnny Ostmeyer
4/22/20	12 p.m. CDT	Flying Clubs - Growing Participation in Aviation	David Leiting
4/22/20	7 p.m. CDT	5 Weather Planning Tips to Get Ready for Summertime Flying*	Scott Dennstaedt
4/29/20	7 p.m. CDT	Float Flying: Freedom to Explore*	Amy Gesch
5/19/20	7 p.m. CDT	Understanding Hypoxia in Aviation*	Steve Martin

* *Qualifies for FAA Wings credit.*

** *Qualifies for FAA Wings and AMT credit.*

Aircraft Maintenance: Winter battery care

Winter often means long intervals between flights, which can spell trouble for aircraft batteries. Every time you fly, your alternator and voltage regulator are working to keep your battery charged and healthy. However, as soon as you shut down, your battery slowly begins to lose its charge and degrade internally. It's just a fact of life and battery chemistry.

All aircraft batteries, both flooded-cell "wet" batteries and sealed, absorbed glass mat batteries, require regular use in order to perform at their peak—that means putting them through cycles of discharging and recharging without reaching critically low voltage levels that can permanently damage the battery. Critically low batteries begin a process of sulfating, where lead sulfate crystals form on the negative cells, reducing their effectiveness and eventually shorting them out. Neglecting an aircraft battery until it can no longer start the aircraft can inflict irreversible damage. Cold winter temperatures bring additional issues because batteries perform at their best when they are warm (but not hot). In fact, a very cold battery will not properly take a charge at all. You're left out in the cold with something that can't help you, and you can't help it.

The ideal solution is, of course, to fly the aircraft regularly for long enough periods of time to effectively allow the aircraft's own systems to charge the battery and keep everything healthy. During periods when that isn't possible, other options are available. Intelligent battery charging systems such as the BatteryMINDER are specifically designed to monitor the voltage and temperature of the battery during charging, providing the right amount of charging at the right time. Frequently called battery tenders, these systems have the added benefit of automatically switching to trickle charge and "de-sulfating" modes that can reverse some amount of minor damage that may have occurred to the internal chemistry of the battery. These aircraft battery-specific chargers are well worth the money, especially considering that using automotive chargers can damage aircraft batteries. According to the experts at Concorde Battery Corp., common automotive chargers are set to charge at voltage levels that are too high for the design of aircraft batteries. The result can be overcharging, boiling or venting of the electrolyte, and permanent damage to the battery.

If at all possible, the battery should be kept warm during the charging process. If your engine has a preheater and your battery is in the cowl, that may be more than enough to accomplish both tasks at the same time for several hours before each flight. As I've written previously, I'm a big fan of remote-control switches that can allow you to control power to your aircraft in advance of your flights. You can use these same switches to control the engine preheater and battery charger (on separate switches). Optional external charging ports, such as those available from companies including BatteryMINDER, can make the process even more convenient and prevent having to remove the cowl or access fuselage-mounted batteries for charging.

For more extended periods, you may need to remove the battery and take it inside to be properly stored and charged until regular flying season returns. Aircraft batteries are expensive, and it pays to protect your investment. Getting the motivation to venture out into the cold to practice the art of flying can be challenging enough. Being proactive about caring for your battery will ensure that your shoveling gets rewarded with the blue skies and stunning winter landscapes that make it all worthwhile. Until next time...happy flying!

(from 3/2/20 AOPA ePilot by Jeff Simon)

Flying Events (within 200nm of KIMT): (B) Breakfast (L) lunch (D) Dinner

Every Friday Fly-in (L) Iola, WI (68C) Noon, but get there early, \$10 for life time membership

Every Thursday (L) Marshfield, WI (MFI), noon till the pizza runs out

Varying dates Wisconsin/Yooper Flying Hamburger Socials Go to www.wiflysocial.com

Mar 14	EAA Props & Hops	Oshkosh, WI (OSH)	7:00pm - 10:00pm
Mar 21	Rusty Pilots Seminar	Kenosha, WI (ENW)	9:00am - 12:00pm
Apr 18	Fly-in (B) pancakes	Oshkosh, WI (OSH)	7:30am - 11:00am
May 5-10	SUN 'n FUN	Lakeland, FL (LAL)	
May 3	Rusty Pilots Seminar	Osthoff Resort, Elkhart Lake, WI	1:00pm - 4:00pm
May 15-17	Aerobatic Practice	Sawyer Airport (SAW), Marquette, MI	
May 24	Fly-in (B) pancakes	Portage, WI (C47)	7:00am - 12:00pm
Jun 7	Fly-in (B) pancakes	Houghton Lake, MI (HTL)	7:00am - 11:00am (EDT)
Jun 13	Fly-in (B)	Muskegon, MI (MKG)	8:00am - 12:00pm (EDT)
Jun 14	Fly-in/Drive-in (B)(L)	Wild Rose Idlewild, WI (W23)	7:30am - 3:00pm
Jun 18	Fly-in BBQ Social	Hangar 8A, Superior, WI (SUW)	5:00pm - 7:00pm
Jun 21	Fly-in (B) pancakes	Waupaca, WI (PCZ)	7:00am - 12:00pm Pilots free
July 16	Yankee Air Museum C-47 & B-25 at Ford Airport	They may be in Escanaba July 14 & 15.	

FAA issues updated guidance on expense sharing

In an advisory circular ([AC 61.142](#)) published February 25, the FAA seeks to clarify the constraints of FAR 61.113(c) by providing examples of flight scenarios that are permissible and impermissible. [FAR 61.113](#) covers private pilot privileges and limitations, and FAR 61.113(c) states that “a private pilot may not pay less than the pro rata share of the operating expenses of a flight with passengers, provided the expenses involve only fuel, oil, airport expenditures, or rental fees.”

The new guidance comes at a time when the FAA is confronting some online aviation marketplaces for engaging in business practices that the agency believes cross over into air transportation regulated under on-demand air charter provisions. Such flying requires a higher grade of pilot certificate than private pilot, and air carrier certification.

What Does “Avionics...Set” Really Mean?

Your checklist won't tell you exactly what avionics should be set for any given phase of flight. So how do you ensure nothing is missed when there are so many possible situations? [See Here.](#)

(From 3/4/20 Pilot Workshops by Bruce Williams)

For when the snow melts in May



Sunset Grill in Three Lakes, WI is at the north end of the grass strip at 40D. It is located 79 nm southwest of K.I. Sawyer on Big Stone Lake. Excellent food. Breakfast & lunch. Park the airplane at the Northeast end of the runway and walk across the road. There is also a campground next to the runway to the South. Also seaplanes come in. [Check for hours.](#)

Contact the airport manager at 715-546-2807 or j_gens15@hotmail.com for runway conditions.

EAA Chapter 850
c/o Ted Kirkpatrick
401 Kirkpatrick Lane
Gwinn, MI 49941

EAA CHAPTER 850 OFFICERS

President: Ted Kirkpatrick, 906-361-6196 aerokirk@gmail.com

Vice President: Fred Benzie, 906-250-7110 fbenzie@chartermi.net

Treasurer: Fred Joyal, 906-226-6749 fjoyal@nmu.edu

Secretary: Ann Joyal, 906-226-6749 ajoyal@nmu.edu

Newsletter Editor: Will Kroeger, 906-241-9070 wkroeger@alphacomm.net

YE Coordinator: Ted Kirkpatrick

Eagle Coordinator: Fred Benzie

Fly-out Coordinator: Fred Benzie

Technical Counselor: Bill Landry, blandry801@aol.com

Dues are \$20.00 a year From January 1st Please send them to our treasurer!

Website: www.850.eaachapter.org/