WIND IN THE WIRES

The Newsletter of Chapter 26, Experimental Aircraft Association ❖ Seattle, WA ❖ Volume XXX No. 9 ❖ September 2022

President's Letter

We got home from Oshkosh on August 6th. We went there for three weeks as usual. We teach at the Air Academy camps the week before and another the week after AirVenture. Our camps with the kids went well. There were about 48 respectful, interested kids in each camp; ratio of about 3:1 boys vs girls.

The weather during the week of AirVenture was perfect; about 75-80 degrees with a breeze and scattered clouds. So it wasn't too hot. The Saturday evening before the start of convention we had a big thunder storm. They had staged several museum planes on the lawn in front of the Air Academy building. It was quite the storm so I was standing outside under the portico taking pictures of the rain coming down sideways. The wind was so strong it picked up the bi-plane that was on the end of the line and cart wheeled it into a tree. We found out later that several RV's had their tails damaged by the strong winds also. Since this was the anniversary of the RV's there was a lot of them! 721 registered as homebuilt, about 62% of all the homebuilts registered.

(Continued on page 2)

Terminal Building at Boeing Field
7259 King County Airport Access Rd, Seattle, WA 98108

Second Thursday At 7:30 PM

https://meet.google.com/jvg-uchh-ecu

This month:

IN PERSON AT BOEING FIELD
Thursday @ 7:30

Online also available: https://meet.google.com/jvg-uchh-ecu

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President's newsletter (Continued)

We had good weather flying there but coming back I had to change and fly farther north to minimize my exposure to some predicted thunderstorms. What we went through was not as bad as it looks on FlightAware.

Since we have been home, I have been doing a lot of flying with my nephew in his Cessna 172. He got his private license in July and is now working on his instrument rating. His airplane has a nice Garmin 530, but not WAAS. It has a good auto pilot and GPSS feature that allows the airplane to fly itself anywhere. Since I am 'old school', round dials and hand flying, this is quite an advancement. He has done a number of ILS's and is getting that figured out. We are working to do GPS approaches, which are actually easier because it does all the thinking – which can get you into trouble. You need to know what will happen next when certain buttons are pushed. For example, going direct, or following the certain legs down final. We have only used the autopilot and GPSS as a breather on some long cross country flights. This IFR flying is a good refresher and a challenge for me as his safety pilot.

Last month the Lerum brothers shared their pictures and experiences of AirVenture. This month I plan to show our pictures
See ya Thursday,
~Dave

General Aviation Moves Closer to an Unleaded Future

The FAA signed supplemental type certificates to allow General Aviation Modifications Inc.'s 100-octane unleaded fuel (G100UL) to be used in **every general spark-ignition engine and every airframe powered by those engines**. The move was hailed by the GA industry as a major step in the transition to an unleaded future. The FAA's approval of the use of G100UL fuel in all piston aircraft directly addresses the industry's long-standing goal of finding unleaded solutions that can be used for the entire GA piston fleet.

"Congratulations to GAMI on this achievement, which is another initial step toward a goal we all want – an unleaded fuel for general aviation," said Jack J. Pelton, EAA CEO and Chairman of the Board. "This is a significant accomplishment that opens the door to the hard work that remains to create a commercial pathway and acceptance across the broad spectrum of GA aircraft."

In 2021 the FAA approved STCs for GAMI covering a smaller number of Cessna 172 engines and airframes, and then expanded those STC approved model list (AML) to include essentially all lower-compression engines. Though that was seen as an encouraging step forward in the years-long path to supply unleaded aviation fuel to the piston aircraft fleet, the STC's did not include aircraft needing the higher-octane fuel that accounts for approximately two-thirds of avgas consumption. Today's announcement by the FAA addresses the needs of those higher-compression engines.

EAA Pushes For LODA Reform

EAA is continuing to push for reform and expansion of the FAA's Letter of Deviation Authority (LODA) program for compensated flight training in experimental aircraft. The LODA system, authorized under FAR 91.319(h), allows for operators of experimental aircraft to be compensated for the use of the aircraft in certain cases for transition or primary training, as prescribed by FAA policy.

The FAA also utilized the LODA system in July 2021 as a means of providing quick relief to those operators affected by the district court ruling in Warbird Adventures v FAA, which disrupted the ability of experimental, limited, and primary category aircraft operators to hire instructors to train in the operator's own aircraft. Experimental aircraft owners and instructors can obtain LODAs that fix this issue via the FAA's application form. EAA also holds an exemption that covers owners of limited category aircraft. EAA and other associations are exploring a legislative solution to this problem while at the same time, the FAA has repeatedly stated that they are pursuing a fast-track rulemaking fix.

EAA Webinars

9/7/22 7 p.m. CDT

What Price Speed?
Qualifies for FAA WINGS and AMT credit.
By: Mike Busch

With fuel prices at all-time highs, it's more important than ever for pilots of GA airplanes to fly in a fuel-efficient fashion. So, how can we get the best bang for our avgas buck? Well, it turns out that there are a bunch of things that contribute to fuel-efficient flying. Mike Busch discusses optimal airspeeds, leaning, throttle and RPM settings, altitude, and fuel price bargain hunting. This webinar should give you the tools you need to make the most of the fuel you buy.

9/21/22 7 p.m. CDT

FAA Enforcement Process
Qualifies for FAA WINGS credit.
By: James Cooling and Alan Farkas

This webinar provides an overview of the FAA enforcement process and philosophy pertaining to certificate holders for alleged violations of the Federal Aviation Regulations. Attorneys James Cooling and Alan Farkas from EAA's Legal Advisory Council will provide tips and best practices for steps to take for airmen and other certificate holders facing a possible enforcement action.

10/05/22 7 p.m. CDT

On a Short Leash – Maintenance Costs
Qualifies for FAA WINGS credit and AMT credit.

By: Mike Busch

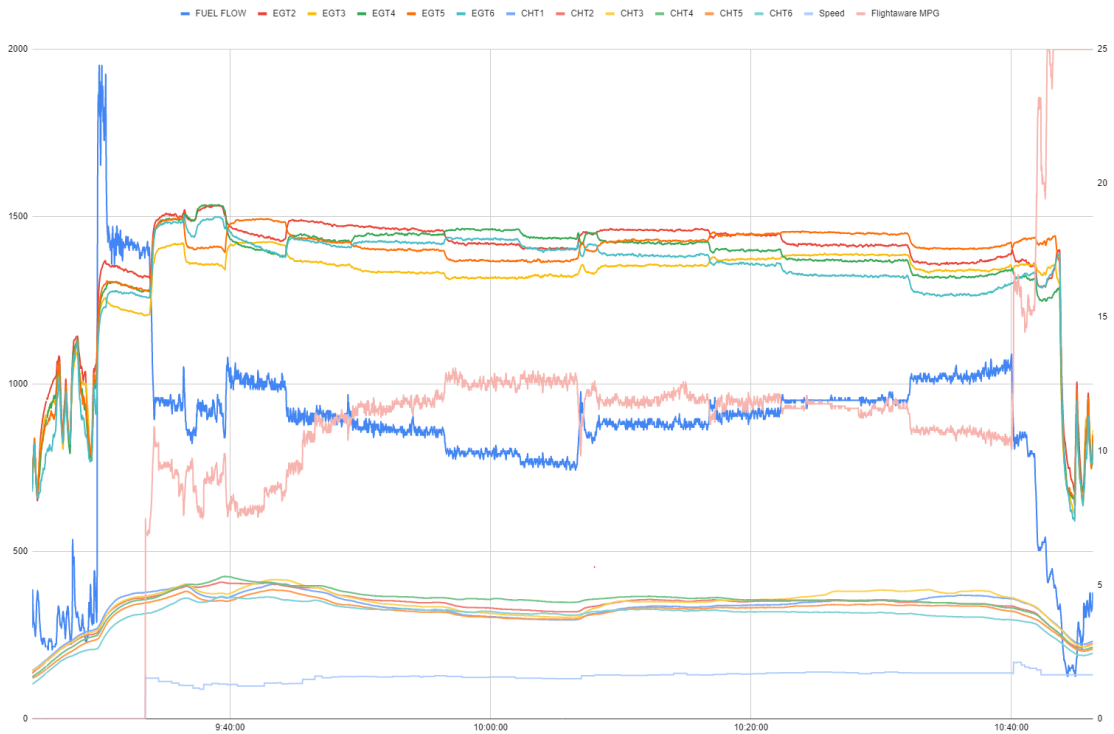
The very best maintenance shops do thorough inspections and meticulous maintenance but can also run up shockingly high invoices unless the aircraft owner is actively engaged and keeps the shop on a short leash. Maintenance guru Mike Busch A&P/IA demonstrates exactly how this should be done, using a real-life example of an owner who appropriately declined two-thirds of the shop's proposed repairs, thereby reducing a $25,000 work order to a $5,000 invoice. You'll learn what kinds of things can be reasonably and prudently declined or deferred, and what things you should always approve.

Clay's Engine Monitor Investigations

I recently got an Insight G2 Engine monitor installed in my 182 and started looking at the data it provides. I'm using this to help me fly more safely and more efficiently.

Some examples:

- I didn't know this but cylinder #1 is way leaner than the rest. So in normal cruise, #1 is LOP while the others are still ROP.
- Instead of automatically putting the carb heat ON before landing, I just check the temperature and decide if it should be on.



In the chart to the left, fuel flow (Blue, near the middle) and efficiency in miles per gallon (Pink, near the middle) are using the scale on the right hand side, but the CHTs and EGTs are on the scale on the left. During the flight after leveling off at 10,500 MSL I adjusted the mixture every few minutes to see how the engine would respond.
I got the GPS speed from both FlightAware and ForeFlight to get efficiency. So I don't correct for winds aloft, but they usually don't change so much my results would be invalid.

On the Wreckord

Just Escapade– Florida: While on a 1-mile final approach for landing, about 400 ft above the ground, the engine lost total power. The pilot applied full throttle and enrichened the mixture, but only a momentary return of power occurred before the engine lost power again. The airspeed decreased and the airplane entered an aerodynamic stall and impacted a house and terrain.

Postaccident examination of the airframe and engine revealed no evidence of any preimpact mechanical malfunctions or failures. Non-volatile memory data recorded during the accident flight revealed a large spike in fuel flow, followed by a 0 rpm reading, which was indicative of a total loss of engine power due to air passing through the fuel line and transducer rather than fuel. It is likely that the fuel flow to the engine was interrupted, but a postaccident examination of the engine and fuel system could not determine what caused the interruption. (3/6/2018)

On the Wreckord

Lancair Legacy– Texas: After leveling off at 9,500 ft, the pilot switched the fuel selector from the right to the left fuel tank. He noticed a change in the sound of the engine, a decline in fuel flow, and a partial loss of engine power. He switched back to the right fuel tank and turned on the auxiliary fuel pump, but this did not correct the problem. Realizing that he would not be able to glide to a nearby airport, the pilot made a forced landing in a plowed field.

Postaccident examination found that the fuel selector had separated just below the selector handle, and the selector valve was found in the 90-percent-closed position. The fuel selector assembly showed extensive wear. It is likely that the fuel selector separated with the valve in an intermediate position when the pilot changed the fuel selector handle position, which resulted in a partial loss of engine power due to fuel starvation as a result of the nearly closed fuel valve. (3/8/2018)

Kitfox– Oregon: While flying about 800 ft above a river during a personal flight, the pilot advanced the throttle to climb, but the engine started to lose power. The pilot elected to land on a nearby island, during which the airplane nosed over.

Postaccident examination of the airplane revealed that the throttle cable set screw on the aft side of the throttle body arm had backed out of its original position and was no longer securing the throttle cable. As a result, the cable moved freely with no corresponding motion on the throttle body arm. Maintenance records revealed that the pilot built and installed the throttle body arm about 7 months and 204 flight hours before the accident. (3/20/2018)

NEWSLETTER

Chapter 26

EXPERIMENTAL AIRCRAFT ASSOCIATION

The Newsletter of EAA Chapter 26