



February 14, 2017

Senator Michael Dembrow
Chair, Senate Environment and Natural Resources Committee
900 Court Street NE
Salem, Oregon 97301

Subject: SB 115 – Prohibits selling, dispensing or using aviation fuel that contains lead or lead compounds after January 1, 2022

Good afternoon Chair Dembrow and Committee Members.

I am Warren Hendrickson, NW Mountain Regional Manager for the Aircraft Owners and Pilots Association (AOPA), the world's largest general aviation organization. I serve as the organization's field representative in seven states (WA, OR, ID, MT, WY, UT, and CO), including over 5,100 members in Oregon.

AOPA opposes SB 115.

It is openly acknowledged that reducing lead in the environment promotes public health. Lead is a pollutant for which the Environmental Protection Agency (EPA) sets enforceable standards to limit its concentration in ambient air. The EPA however has not issued either an Endangerment Finding or proposed a ban on leaded avgas.

Why is lead used as a fuel additive? Only lead provides the necessary octane level required to safely operate piston aircraft engines. Use of lower octane fuel may result in engine failure. In 2013, the EPA recognized "...no operationally safe, suitable replacement for leaded fuel has yet been found to meet the needs of the piston engine aircraft fleet."

With over 7,700 registered aircraft in the state of Oregon, the vast majority of which use leaded aviation fuels, the effect of SB 115 will be to shut down the state's general aviation industry. What does a shutdown mean to this state's citizens?

- A loss of a significant portion of the \$22 billion dollar economic impact and 76,000 jobs that airports and their businesses provide. This does not include the indirect economic impact resulting from those jobs and businesses.
- A reduction in the Oregon average annual salary of \$57,000, one that exceeds federal standards for a living wage, with a resulting negative impact on economic growth.
- The loss of business transportation, business development opportunities (businesses move where there is airport access), high value time critical cargo and mail delivery, emergency and medevac access, law enforcement, rural aerial firefighting, search and rescue, agriculture, pipeline survey, flight training, and recreational travel that bring millions of tourism dollars into the state.
- Since 2009, over 300 million dollars in FAA grant funds and over 89 million in ConnectOregon funding have maintained and improved the infrastructure of Oregon airports. Those jobs and resulting tax revenues will now be lost.

- The elimination of charitable flights for medical or humanitarian purposes. As an Angel Flight command pilot, I personally have flown underprivileged and health-challenged children from Portland airports to camp in Carnation, WA. Those children will no longer have that efficient, free ride to camp.

Is leaded avgas really a problem? No, it is not.

EPAs current National Ambient Air Quality Standard (NAAQS) for lead is 0.15 micrograms per cubic meter. The Oregon Department of Environmental Quality (DEQ) has recognized that same standard. The most recent monitoring data published by DEQ for Hillsboro Hare Field, located one-quarter mile from Portland/Hillsboro Airport – the busiest airport in the state, with significant piston traffic using leaded fuel – indicated that the 2013 annual average lead concentration was only 0.0030 micrograms per cubic meter, fifty times below the allowable federal and state standard.

EPA also requires lead monitoring around airports emitting at least one ton of lead a year. Based on the most recent Portland/Hillsboro Airport emissions inventory, between 0.5 and 0.6 tons of lead is emitted annually. Lead monitoring is therefore not required at the busiest airport in the state, and by extrapolation not at any other state airport either.

What will the unintended consequences be if SB 115 is enacted?

- Citizens will not receive the air quality protection they think they will receive.
- Out-of-state pilots will continue flying over this state with leaded fuel, tankering the extra fuel needed to transit the state's borders. While the state may attempt to prevent the use of leaded fuel in the state, it has no such authority in the airspace overlying it.
- Oregon aircraft owners will simply take their Oregon dollars to Washington, Idaho, and California to maintain flight operations, dollars these neighboring states will be happy to absorb.

Is there a solution? Yes, but this bill is not it.

The Piston Aviation Fuels Initiative (PAFI) is a program to develop a lead free alternative aviation fuel. Please note the key word "alternative" rather than "replacement." This new fuel may not satisfy all piston engine requirements. The PAFI Steering Group is a Who's Who of aviation organizations: AOPA, American Petroleum Institute, Experimental Aircraft Association, General Aviation Manufacturers Association, National Air Transportation Association, National Business Aircraft Association, and the Federal Aviation Administration. Two manufacturers have been selected to test these new products and the results will not be known until late 2018 at the earliest.

Once the test results are in, and even assuming they are successful, it will take several additional years to create the necessary infrastructure, production facilities, distribution network, and point of sale locations to ensure widespread availability.

There are other alternatives to leaded aviation fuel; however they are all limited in scope and/or availability. Unleaded motor fuel (mogas) can only be used in a small subset of low compression piston engines. 94UL unleaded avgas is also limited to low compression engines and has limited availability due to their being only a single producer. New piston engine aircraft technology will be costly to develop and expensive to install as a replacement engine.

A better legislative bill for Oregon would be to create a series of incentives that would entice future unleaded aviation fuel producers to locate here. Establishment of such a facility and distribution network would both add Oregon jobs and serve as a long-term economic driver.

In summary:

- Leaded aviation fuels do not pose a significant air quality health hazard to Oregon citizens.
- Piston aircraft comprise a significant portion of Oregon's transportation infrastructure and economy.
- Development of alternative lead free aviation fuels is underway although it may be several years before these tests are proven to be a viable option. Once the viability is proven production, distribution, and marketing activities will then have to be addressed – a process which may take several years beyond 2022.
- Banning leaded aviation fuels will not prevent leaded fuel aircraft from operating over Oregon.
- Aviation's contributions to the health and welfare of the state's citizens will be lost if a leaded aviation fuel ban is established.
- Pilots and aviation businesses support incentives for new fuel producers to manufacture and distribute future alternative lead free aviation fuel.

For these reasons, AOPA opposes SB 115. Do not pass. Thank you.

Sincerely,



Warren Hendrickson

NW Mountain Regional Manager