Date: Dec.13, 2023

Topic: Port of Portland Commission Meeting Comments

From: Miki Barnes

Vice President Alexander, Members of the Commission.

Thank you for this opportunity to present comments.

There are four fuel developers involved in the FAA EAGLE initiative. Two are working with the FAA through the Supplemental Type Certificate (STC) process. One is General Aviation Modifications Inc. (GAMI) which has already produced a drop-in FAA approved unleaded fuel that can be used in all piston-engine aircraft. The other is Swift which has an unleaded alternative on the market, UL94, and is in the process of testing a higher octane fuel, 100R, that can be used in all aircraft.

Yet despite the availability of these fuels, the Port has stated their support for the two PAFI developers, neither of which have a product ready for manufacture and distribution. PAFI has received at least \$90M in government funding over the past ten years and still has nothing to show for this substantial cash outlay.

One of the PAFI developers involves a partnership between Phillips and Afton. According to an Aviation Consumer Staff Report, "Phillips is possibly the largest producer of 100LL. Afton Chemical is a corporate sister company to Ethyl Corporation, which currently imports and distributes tetraethyl lead (TEL). We wonder how motivated they are to find a replacement for 100LL."

Per the Phillips 66 website, "Phillips 66 is among the largest refiners in the United States and a major contract jet and avgas fuel supplier to private, commercial, and military aviation." In other words, Phillips turns a hefty profit from selling leaded avgas and may stand to lose revenue if another fuel developer, such as GAMI or Swift, brings an unleaded alternative to market.

Then there's the Afton/Ethyl connection. Included in these comments is a link to a 25 minute video entitled The Man Who Accidentally Caused the Death of Millions of People. A century ago, the Ethyl Corp was founded by Charles Kettering in partnership with Thomas Midgley, the man who created tetraethyl lead.

Though both these men knew lead was toxic, they chose to place profits over concern for public health and the environment.

When speaking to Kettering about his discovery, Midgely stated, "Can you imagine how much money we're going to make with this? We're going to make 200 million dollars maybe even more," a sum that would exceed 3 billion dollars in today's currency. (8 min 50 second mark in video)

"Doctors and public health officials from MIT, Harvard, and the U.S. health service wrote to Midgely and warned them about producing tetraethyl lead. They called lead a creeping and malicious poison and a serious menace to public health. Their concerns were dismissed." (At 12:00 minute mark in video)

Though Phillips and Afton both profit from the sale of leaded aviation fuel, the person chosen to lead the Supply Chain and Infrastructure Pillar of the EAGLE initiative is Ryan Manor. According to an Experimental Aircraft Association (EAA) posting, "Ryan Manor is Director, Fuel Quality & Innovation, General Aviation, at Phillips 66. He is responsible for General Aviation's quality control, inspection, training and refueler programs. He's currently leading the team at Phillips 66, working alongside Afton Chemical, to develop an unleaded aviation gasoline replacement. Ryan's also involved in the FAA's Piston Aviation Fuel Initiative (PAFI), playing a key role in the Deployment Working Group."

That a person who is leading the Phillips/Afton team in developing an unleaded fuel, is also in charge of managing supply chain and infrastructure development for GAMI and Swift, both of which have developed unleaded avgas alternatives, represents a glaring and egregious conflict of interest.

For the reasons set forth, I urge the Port to put their support behind GAMI fuel rather than the PAFI program, which has failed to produce results and which has a long history of poisoning and compromising public health while preserving their own profit margins.

A 3/25/2023 Aviation Consumer article, <u>Unleaded Avgas: More Foot Dragging</u> asks, "Why hasn't EAGLE called Swift, Phillips 66, Afton Chemical, Lyondell or VP Racing on their glaring, to us, shortcomings? In our opinion, EAGLE exists to provide a fleet-wide unleaded fuel solution and its public actions, for reasons unknown to us, certainly seem to indicate that it is acting as a cheerleader for fuels that are currently incapable of becoming one—while pushing aside the one that is already fully FAA-certificated."

Please include this written testimony in the meeting minutes.

Thank you for your time and consideration.

Kind Regards.

Miki Barnes