

# **Background -- ELIMINATE AVIATION GASOLINE LEAD EMISSIONS (EAGLE)**

## **What Is The EAGLE Initiative?**

The EAGLE initiative is a comprehensive public-private partnership consisting of aviation and petroleum industry and U.S. government stakeholders, working toward the transition to lead-free aviation fuels for piston-engine aircraft by the end of 2030, without compromising safety or economic health of the general aviation industry.

## **How Will EAGLE Be Structured?**

The EAGLE initiative will be modeled after CAAFI (Commercial Aviation Alternative Fuels Initiative) and will be led by an Executive Director selected jointly by industry and government. Work on the EAGLE initiative will be organized in four pillars, each led by an industry expert or government leader.

## **What Are EAGLE's 4 Focus Areas, Or Pillars?**

- **Regulatory and Policy:** Work will focus on the government policies and processes needed in areas such as fuel authorization, certification, lead emissions standards, and infrastructure as well as conducting outreach to industry stakeholders and international partners.
- **Unleaded Fuel Testing and Qualification:** Work will focus on the research, testing, and qualification necessary for a viable, safe, high-octane unleaded replacement for 100 octane low lead (100LL) and issuance of an FAA eligible fleet authorization.
- **Research & Development:** Work will focus on research and testing, effective and timely certification of advanced technology designs, and evaluation of means of compliance and operational procedures to address the technical challenges associated with high-performance engines and unleaded fuels.
- **Business Infrastructure and Implementation:** Work will focus on supporting policy and regulatory proposals for maintaining 100LL availability and airport access to ensure safety during the transition and on supporting standards and regulatory pathways to market for the production, distribution, and servicing of the new unleaded fuel, including government incentive and policy programs.

## **What Are Some Activities And Objectives To Be Addressed In This Initiative?**

### **Regulatory and Policy:**

- Issue an FAA fleet authorization process for efficient approval and use of unleaded fuels
- Review, update and prioritize FAA certification processes and projects for engine/aircraft and modifications to operate with unleaded fuel, including means of compliance based on latest test equipment and analysis capabilities
- FAA, in coordination with EPA, will promulgate rulemaking to reduce or eliminate lead emissions without compromising safety
- Establish a program to foster distribution infrastructure at airports serving general aviation
- Assist through new or existing programs the accelerated transition of flight schools to unleaded fuel
- Facilitate training, education, and awareness among stakeholders to mitigate safety risk of multiple aviation fuels and transition to replacement fuels
- Engage and coordinate with international government and industry stakeholders regarding the plans for avgas transition

**Unleaded Fuel Testing and Qualification:**

- R&D investment for fuels development, evaluation and testing necessary for qualification and authorization of unleaded fuels
- Collaborative government/industry testing and qualification of potentially viable 100 octane replacement fuel to support consensus fuel specification and issuance of FAA eligible fleet authorization
- Establish a process that provides for the use of FAA ATC/STC certification compliance data and consensus fuel specification toward issuance of FAA eligible fleet authorization
- Collaborative government/industry testing and qualification of potential new <100 unleaded high-octane fuels to support consensus fuel specification and issuance of FAA eligible fleet authorization
- Demonstration of FAA issuance of eligible fleet authorization for existing UL91/94 fuel specification to validate processes and clarify applicability which reduces risk of misfueling

**Research & Development:**

- FAA and industry collaborate on R&D and testing of advanced technology design concepts to enable existing aircraft and engines to operate on unleaded fuel including efficient means for FAA approval
- Evaluate modern engine monitoring technologies and operational procedures as means to maintain safety and performance when operating on lower octane fuel
- Collaborative FAA-industry solutions to ensure effective and timely FAA certification of advanced technology designs

**Business Infrastructure and Implementation:**

- Supporting policy and regulatory proposals for maintaining 100LL availability and airport access to ensure safety during the transition across the country for use by general aviation aircraft Facilitate government policy, regulatory proposals and voluntary consensus standards that will support a commercially viable supply chain and quality-focused infrastructure for the deployment of unleaded fuel, including the promotion of free-market competition
- Evaluate and support program(s) that incentivize fuel producers and distributors, aircraft and engine manufacturers, and GA operators to accelerate development, qualification, deployment, and use of unleaded fuels
- Evaluate Environmental, Social, and Governance (ESG) commitments to help engage additional organizations and investors in this effort
- Facilitate policy proposals at the Federal and State level to increase production and distribution – as well as enable and encourage greater use – of commercially viable replacement unleaded fuel

**When Will Work on EAGLE Begin?**

Initial organizational discussions have begun with a more formal kick-off meeting tentatively scheduled for the mid-March timeframe.