

# EAGLE Quad Charts



Eliminate Aviation Gasoline Lead Emissions (EAGLE)

# Pillar A Quad Chart: Business (Fuel) Infrastructure and Implementation



## Pillar Session Objectives

- **Evaluate** and support program(s) that **incentivize** fuel producers and distributors,
- **Facilitate** policy proposals at the Federal and State level
- **Facilitate** government policy, regulatory proposals and voluntary consensus standards Evaluate **Environmental, Social, and Governance** (ESG) commitments to help engage additional organizations and investors in this effort
- Support policy and regulatory proposals for **maintaining 100LL availability** and airport access to **ensure safety** during the transition across the country for use by GA aircraft

## Pillar Session Outcomes

- Provided an overview of pillar work since the March kickoff meeting including the following:
  - Foundation document (north star)
  - Membership overview
  - Reviewed goals & objectives
  - Approach to achieving objectives
  - Examples of deployment checklist and overview of 100LL distribution system

## Next Steps

- Pillar A Team Member Outreach
- Build Out Work Streams
- Level Setting Documents
- Metrics

## Pillar Session Feedback

- In progress



# Pillar B: Research, Development and Innovation – Quad Chart

## Pillar Session Objectives

- **Facilitate Transition to Unleaded Replacement Fuel**
- **Mitigate potential impacts** on existing fleet of aircraft
- **Address safety and technical challenges** associated with high-performance engine use of unleaded fuels
- Research and testing of **advanced technology designs**
- Focus on effective and timely **FAA certification**

## Pillar Session Outcomes

- Shared awareness and intended scope of R&D and innovation pillar activities
  - Mitigate potential impacts of UL fuel so that it can be a potentially viable replacement
- Share FAA UL fuel R&D program
- Solicit stakeholder inputs & engagement

## Next Steps

- Identify interested stakeholders to participate
- Establish pillar working group & meeting schedule
- Identify R&D technology and process areas likely needed based on known fuel candidates
- Develop proposed workplan activities

## Pillar Session Feedback

- Critical milestone is to identify potentially viable UL fuel replacement(s) for 100LL ASAP
  - Understanding of the safety & technical impacts that need to be mitigated (such as materials, operational procedures, etc)
- Initial R&D to address ability for high-performance engines to operate safely on a lower octane fuel

# Pillar C Quad Chart: Unleaded Fuel Evaluation and Authorization



## Pillar Session Objectives

- **Complete test and evaluation** of candidate replacement fuels for 100 Low Lead (100LL) aviation fuel
- **Identify at least one unleaded fuel** acceptable for widespread use
- **Institutionalize fleet authorization process** for unleaded fuels
- **Include education, training, awareness, and outreach** responsibilities

## Pillar Session Outcomes

- 1) Shared status of objectives since last meeting in March 2022:
  - Status of PAFI Testing
  - UL91 / UL94 identified as pathfinder fuel for fleet authorization process – 68% of fleet eligible
  - Fleet Authorization Policy Document undergoing formal FAA internal coordination
  - Lessons Learned, FAQs, and Index of PAFI Test Plans will be posted to AvGas website
- 2) Engagement of stakeholders in continuing dialogue

## Next Steps

- 1) Continue PAFI process to evaluate the 2 candidate fuels
- 2) Publish Fleet Authorization document for public review
- 3) Authorize UL91 / UL94 for eligible models
- 3) Post the following to the FAA AvGas website:
  - Frequently Asked Questions (FAQs); Lesson Learned document; PAFI Test Plan Index
- 4) Planned outreach and engagement opportunities:
  - Stakeholder Pillar C meetings
  - PAFI Technical Advisory Committee (TAC) meeting – July 2022
  - Lessons Learned webinar – August / September 2022
  - Fleet Authorization Policy webinar – Fall 2022 (TBD)

## Pillar Session Feedback

- 1) Acknowledgement of the risk of not meeting the milestone of completing Initial PAFI Testing phase by end of December 2022, if the candidate fuels are not received by July 31, 2022. Schedule contingencies needed.
- 2) Interest expressed on ability of PAFI/Fleet Authorization process to accommodate STC fuels
- 3) Interest in determining In Kind Support necessary from OEMs to support full scale Testing phase

# Pillar D Quad Chart: Regulation, Policy, and Programmatic Activities



## Pillar Session Objectives

Work is focused on government efforts:

- **Regulatory processes** for EPA and FAA
- **Policies** that affect funding for airport fueling infrastructure
- **Programmatic activities** that reduce or eliminate reliance upon leaded aviation fuels
- **Includes education, training, awareness, and outreach** responsibilities

## Pillar Session Outcomes

- Provided an update on EPA regulatory progress regarding Endangerment Finding
- Discussed FAA's ASCENT Research Center of Excellence that could be utilized to reduce reliance upon leaded avgas
- Guidance under development for flight schools to safely transition to unleaded fuels
- Identified airport activities related to Transition-Enabling Infrastructure, Guidance Updates, and Immediate Actions
- Presented the possibility for FAA to do demonstration projects
- Highlighted the efforts of existing airport Early Adopters

## Next Steps

- Continue close EPA/FAA collaboration regarding regulations
- Continue developing guidance materials
  - Continue working on guidance for flight schools
  - Investigate opportunities for grant assurances
- Continue discussing ways in which programmatic activities could be utilized to reduce reliance upon leaded aviation gasoline
- Continue discussions on the potential for Demonstration Projects
- Continue to promote Early Adopters

## Pillar Session Feedback

- Coordinate with NATA, GAMA, and others to make the best use of existing guidance materials
- Ensure 100LL remains available nationally during the transition to facilitate safe operations until no longer necessary
- Develop airport guidance on grant assurances
- Consider developing an EAGLE response to the upcoming EPA proposal to Endangerment Finding
- Consider developing risk evaluation criteria for future fuels that could replace 100LL