



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Effective Date:

JAN 31 2011

SUBJ: Unleaded Avgas Transition Aviation Rulemaking Committee

1. Purpose of this Charter. This charter establishes the Aviation Rulemaking Committee (ARC) for Unleaded Avgas Transition pursuant to the authority of the Administrator of the Federal Aviation Administration (FAA) under Title 49 of the United States Code (49 U.S.C.) section 106(p)(5). This charter also outlines the committee's organization, responsibilities, and tasks.

2. Audience. The audience for this charter includes employees within the Office of the Associate Administrator for Aviation Safety, the Office of the General Counsel, the Office of Aviation Policy, International Affairs, and Environment, and aviation industry representatives from the general aviation community, including aviation fuel specialists.

3. Background. Aviation gasoline (avgas) is the only remaining transportation fuel in the United States that contains lead. Environmental regulations have led to the global replacement of all other leaded transportation fuels with unleaded alternatives. Over 160,000 piston-engine aircraft rely on this fuel for safe operation. The lead additive in avgas protects piston engines against damaging detonation (or engine knock) at the higher power levels required by aircraft. Operation with inadequate fuel performance can result in engine failure and aircraft accidents. Impending environmental regulations along with production and distribution issues threaten the continued availability of leaded avgas.

Historically, the FAA has played a key role in industry initiatives to develop and deploy unleaded fuels for piston-engine aircraft. Testing and investigation of unleaded fuel formulations has been performed by the FAA's William J. Hughes Technical Center since the mid 1990s. The Aircraft Certification Service has supported several projects to approve unleaded aviation fuels, and the FAA participates in aviation fuel industry research and specification-writing organizations. In recognition of the importance of this effort, the FAA has established a Flight Plan initiative to "continue working with the General Aviation (GA) community to test, adopt, and certify a new aviation gasoline fuel standard."

Various elements of the GA community have voiced their concerns with the potential consequences of a disruption of the supply of lead-containing avgas. This would have significant economic consequences that would impact a large number of people.

In July 2010, the FAA was approached by the GA Coalition¹ to take a leadership role in the industry efforts to develop and deploy an unleaded avgas. This Unleaded Avgas Transition ARC charter is being established in response to this request.

4. Organization and Administration of the Unleaded Avgas Transition ARC. We will set up a committee of members of the general aviation community, including aviation fuel specialists with diverse viewpoints. FAA participation and support will come from all affected lines-of-business. Where necessary, the committee may set up specialized work groups that include at least one committee member and invited subject matter experts from industry and government.

The charter is set up as follows:

a. The committee sponsor is the Manager, Engine and Propeller Directorate, who:

- (1) Appoints members of organizations to the committee, at the manager's sole discretion;
- (2) Receives all committee recommendations and reports;
- (3) Selects industry and FAA co-chairpersons for the committee; and
- (4) Provides administrative support for the committee, through the Aircraft Certification Service

b. The co-chairpersons will:

- (1) Determine (with other committee members) when a meeting is required (a quorum is desirable at all committee meetings, but not required);
- (2) Arrange notification to all members of the time and place of each meeting;
- (3) Draft an agenda for each meeting and conduct the meeting;
- (4) Keep the meeting minutes; and
- (5) Provide status updates to the Manager, Engine and Propeller Directorate, at periodic intervals over the duration of this charter.

5. Committee Membership.

a. The committee will consist of approximately 10 to 20 members, selected by the FAA, representing aviation associations, aircraft and engine manufacturers, petroleum and other fuel producers, environmental groups, FAA and other Government entities, and other aviation industry participants.

¹ The GA Coalition is comprised of the General Aviation Manufacturers Association (GAMA), the Aircraft Owners and Pilots Association (AOPA), the Experimental Aircraft Association (EAA), the National Air Transportation Association (NATA), and the American Petroleum Institute (API). These organizations represent the key stakeholders in the aviation industry such as aviation consumers, manufacturers, fuel producers and distributors.

b. Each member or participant on the committee should represent an identified part of the aviation community and have the authority to speak for that community. Membership on the committee will be limited to promote discussions. Active participation and commitment by members will be essential for achieving the committee objectives and for continued membership on the committee. The committee may invite additional participants as subject matter experts to support specialized work groups.

6. Public Participation. Persons or organizations that are not members of this committee and are interested in attending a meeting must request and receive approval in advance of the meeting from a committee co-chairperson.

7. Committee Procedures and Tasks.

a. The committee provides advice and recommendations to the Manager, Engine and Propeller Directorate, ANE-100. The committee acts solely in an advisory capacity.

b. Committee tasks include, but are not limited to, the following:

(1) Investigate, prioritize, and summarize the current issues relating to the transition to an unleaded avgas.

(2) Consider the following factors when performing this activity:

- (i) Aircraft and engine performance requirements for unleaded avgas
- (ii) Properties and composition of unleaded avgas
- (iii) Airworthiness approval of unleaded avgas
- (iv) Environmental impacts of unleaded avgas
- (v) Distribution infrastructure issues relating to unleaded avgas
- (vi) Production issues relating to unleaded avgas
- (vii) Economic issues relating to unleaded avgas
- (viii) Communication with the diverse population of users

(3) Identify the key issues and recommend the tasks necessary to investigate and resolve these issues.

(4) Upon completion of this study, the Unleaded Avgas Transition ARC will provide recommendations for collaborative industry-government initiatives to facilitate the development and deployment of an unleaded avgas with the least impact on the existing piston-engine aircraft fleet. These should include, but not be limited to, the following items:

- (i) A recommendation for an industry-government framework and top-level plan.
- (ii) A recommendation for an organizational structure, funding mechanisms, and top-level work scope for this framework and plan.

- (iii) Proposed timelines based on the complexity and priority of the recommendations.
- (iv) Specific implementation plans and processes to ensure that recommendations meet these objectives.

(5) The committee will provide reports with written recommendations to the Director of the Aircraft Certification Service, as appropriate.

c. The committee may propose additional tasks as necessary to the Manager, Engine and Propeller Directorate, for approval.

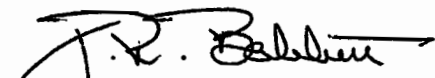
d. The ARC will submit a report detailing recommendations for task b.(4) not later than 6 months from the effective date of this charter. The charter may be extended up to 6 months beyond the expiration date, if it is in the interest of the FAA to do so.

8. Cost and Compensation. The estimated cost to the Federal Government for the Unleaded Avgas Transition ARC is approximately \$7,500. All travel costs for government employees will be the responsibility of the government employee's organization. Non-government representatives, including the industry co-chair, serve without government compensation and bear all costs related to their participation on the committee.

9. Availability of Records. Records, reports, agendas, working papers, and other documents made available to, prepared for, or prepared by the committee will be available for public inspection and copying at the FAA Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803, consistent with the Freedom of Information Act, 5 U.S.C. 552. Fees will be charged for information furnished to the public according to the fee schedule in 49 CFR part 7.

10. Committee Term. This committee becomes an entity on the effective date of this charter. The committee will remain in existence for a term of 6 months unless its term is ended sooner or extended.

11. Distribution. This charter is distributed to director-level management in the Office of the Associate Administrator for Aviation Safety; the Office of the Chief Counsel, the Office of Aviation Policy, International Affairs, and Environment, and the Office of Rulemaking.



J. Randolph Babbitt
Administrator