The Value of Industry Voluntary Consensus Standards

Historically, the standards for refining, blending, and distributing aviation gasoline (avgas) are developed and maintained collaboratively by the petroleum, liquid fuels, and aviation industries. These standards facilitate the handling of petroleum products and have been a key factor in the consistent and safe production, sale, transportation, and use of fuel in transportation industries. ASTM International has served as the primary body for this process, resulting in standards with broad industry understanding and consensus.

ASTM International

For many decades, ASTM has been a globally recognized industry consensus body that facilitates the use, production, and distribution of all fuels utilized in the U.S. This includes all standards for Autogas, diesel fuel, jet fuel, SAF, 100LL avgas, UL94 avgas, and other commercial fuel products. FAA/Industry leaders within EAGLE are actively pursuing both FAA certification and ASTM standards as the base requirements for commercially available unleaded fuels.

Establishment of Testing Standards and Fuel Production Specifications

Traditionally, much of the stakeholder understanding and acceptance of a fuel is gained as the fuel developer works through the ASTM International voluntary consensus standard process to obtain a production specification

ASTM committees for aviation fuels include manufacturers, producers, distributors, providers, users, and other subject matter experts. These committees review and assess data related to fuel production methods, performance characteristics, and specification requirements to establish consensus amongst all stakeholders to facilitate production, distribution, and use of a fuel specification. ASTM fuel specifications are used for all major transportation sector fuels.

FAA's Role in Fuel Specifications

Currently, the FAA does not directly regulate, approve, or oversee the production or distribution of any fuel. The FAA approves the use of the fuel as an operating limitation for aircraft and aircraft engine models.

- For voluntary consensus standard specifications, such as ASTM specifications, the FAA participates in the review and approval as one of many stakeholders who share the responsibility to ensure that the specification meets the fuel's specification of property, performance, and quality control.
- For independent specifications, the FAA reviews the specification and approves it once it is found to provide an equivalent specification of property, performance, and quality control.

In both cases, the actual production and distribution of fuels are outside of the FAA's purview.