Regulatory Announcement

EPA Adopts NOx Emission Standards for Aircraft Gas Turbine Engines

The U.S. Environmental Protection Agency (EPA) is publishing a final rulemaking to adopt the NOx emission standards approved by the United Nation's International Civil Aviation Organization (ICAO).

Overview

EPA is adopting emission standards and related provisions for aircraft gas turbine engines with rated thrusts greater than 26.7 kilonewtons. These engines are used primarily on commercial passenger and freight aircraft. The final rule contains standards and related provisions that were previously adopted by ICAO. Specifically, EPA is adopting two new tiers of more stringent emission standards for oxides of nitrogen (NOx). These are referred to as the Tier 6 (or CAEP/6) standards and the Tier 8 (or CAEP/8) standards.

The standards will apply differently depending on the date the engine model received its original type certificate as follows.

- Engine models that were originally certificated prior to the effective date of the rule may continue production without meeting the Tier 6 standards through December 31, 2012. After that date, these engines must comply with the new Tier 6 standards (this date is generally referred to as the Tier 6 production cutoff). This delay in complying with the Tier 6 standards for previously certificated engine models is intended to allow for an orderly transition to the Tier 6 standards.
- Engine models that were originally certificated between the effective date of the rule and December 31, 2013 must comply with the Tier 6 standards.
- Engine models that were originally certificated beginning on or after January 1, 2014 must comply with the Tier 8 standards. EPA anticipates establishing a future production cutoff to require all engine models that were originally certificated before the above date to comply with the Tier 8 standards. We will consider this in a future action after first pursuing it within ICAO.

EPA United States Environmental Protection Agency

Office of Transportation and Air Quality
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EPA is also adopting several additional changes that would affect all aircraft gas turbine engines that are subject to current emission requirements. First, EPA is clarifying when a design variation of a previously certified engine model causes the emission characteristics of the new version to become different enough from its parent engine that it must conform to the most current emissions standards. Second, EPA is amending the emission measurement procedures. These revisions are primarily intended to reflect current certification practices. Finally, EPA is requiring all gas turbine and turboprop engine manufacturers that are subject to exhaust emission standards to report to EPA, emission data and other information necessary for the purpose of conducting emission analyses and developing appropriate public policy for the aviation sector.

These regulatory requirements, except a portion of the engine manufacturer reports, have already been adopted, are consistent with, or are actively under consideration by the ICAO. The requirements are consistent with the United Nations Convention on International Civil Aviation.

For More Information

You can access the rule and related documents on EPA's Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/aviation.htm

For more information on this final rule, please contact the Assessment and Standards Division at:

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