

§ 34.10

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short durations at infrequent intervals. A request for such a determination shall be made before the flight takes place.

(b) *Exemptions for very low production engine models.* The emissions standards of this part do not apply to engines of very low production after the date of applicability. For the purpose of this part, "very low production" is limited to a maximum total production for United States civil aviation applications of no more than 200 units covered by the same type certificate after January 1, 1984. Engines manufactured under this provision must be reported to the FAA by serial number on or before the date of manufacture and exemptions granted under this provision are not transferable to any other engine.

(c) *Exemptions for new engines in other categories.* The emissions standards of this part do not apply to engines for which the Administrator determines, with the concurrence of the Administrator of the EPA, that application of any standard under § 34.21 is not justified, based upon consideration of—

(1) Adverse economic impact on the manufacturer;

(2) Adverse economic impact on the aircraft and airline industries at large;

(3) Equity in administering the standards among all economically competing parties;

(4) Public health and welfare effects; and

(5) Other factors which the Administrator, after consultation with the Administrator of the EPA, may deem relevant to the case in question.

(d) *Time-limited exemptions for in-use engines.* The emissions standards of this part do not apply to aircraft or aircraft engines for time periods which the Administrator determines, with the concurrence of the Administrator of the EPA, that any applicable standard under § 34.11(a), or § 34.31(a), should not be applied based upon consideration of—

(1) Documentation demonstrating that all good faith efforts to achieve compliance with such standard have been made;

(2) Documentation demonstrating that the inability to comply with such standard is due to circumstances be-

yond the control of the owner or operator of the aircraft; and

(3) A plan in which the owner or operator of the aircraft shows that he will achieve compliance in the shortest time which is feasible.

(e) Applications for exemption from this part shall be submitted in duplicate to the Administrator in accordance with the procedures established by the Administrator in part 11.

(f) The Administrator shall publish in the FEDERAL REGISTER the name of the organization to whom exemptions are granted and the period of such exemptions.

(g) No state or political subdivision thereof may attempt to enforce a standard respecting emissions from an aircraft or engine if such aircraft or engine has been exempted from such standard under this part.

Subpart B—Engine Fuel Venting Emissions (New and In-Use Aircraft Gas Turbine Engines)

§ 34.10 Applicability.

(a) The provisions of this subpart are applicable to all new aircraft gas turbine engines of classes T3, T8, TSS, and TF equal to or greater than 36 kilonewtons (8090 pounds) rated output, manufactured on or after January 1, 1974, and to all in-use aircraft gas turbine engines of classes T3, T8, TSS, and TF equal to or greater than 36 kilonewtons (8090 pounds) rated output manufactured after February 1, 1974.

(b) The provisions of this subpart are also applicable to all new aircraft gas turbine engines of class TF less than 36 kilonewtons (8090 pounds) rated output and class TP manufactured on or after January 1, 1975, and to all in-use aircraft gas turbine engines of class TF less than 36 kilonewtons (8090 pounds) rated output and class TP manufactured after January 1, 1975.

§ 34.11 Standard for fuel venting emissions.

(a) No fuel venting emissions shall be discharged into the atmosphere from any new or in-use aircraft gas turbine engine subject to the subpart. This paragraph is directed at the elimination of intentional discharge to the atmosphere of fuel drained from fuel

nozzle manifolds after engines are shut down and does not apply to normal fuel seepage from shaft seals, joints, and fittings.

(b) Conformity with the standard set forth in paragraph (a) of this section shall be determined by inspection of the method designed to eliminate these emissions.

(c) As applied to an airframe or an engine, any manufacturer or operator may show compliance with the fuel venting and emissions requirements of this section that were effective beginning February 1, 1974 or January 1, 1975, by any means that prevents the intentional discharge of fuel from fuel nozzle manifolds after the engines are shut down. Acceptable means of compliance include one of the following:

(1) Incorporation of an FAA-approved system that recirculates the fuel back into the fuel system.

(2) Capping or securing the pressurization and drain valve.

(3) Manually draining the fuel from a holding tank into a container.

Subpart C—Exhaust Emissions (New Aircraft Gas Turbine Engines)

§ 34.20 Applicability.

The provisions of this subpart are applicable to all aircraft gas turbine engines of the classes specified beginning on the dates specified in § 34.21.

§ 34.21 Standards for exhaust emissions.

(a) Exhaust emissions of smoke from each new aircraft gas turbine engine of class T8 manufactured on or after February 1, 1974, shall not exceed a smoke number (SN) of 30.

(b) Exhaust emissions of smoke from each new aircraft gas turbine engine of class TF and of rated output of 129 kilonewtons (29,000 pounds) thrust or greater, manufactured on or after January 1, 1976, shall not exceed

$SN=83.6(rO)^{-0.274}$ (rO is in kilonewtons).

(c) Exhaust emission of smoke from each new aircraft gas turbine engine of class T3 manufactured on or after January 1, 1978, shall not exceed a smoke number (SN) of 25.

(d) Gaseous exhaust emissions from each new aircraft gas turbine engine shall not exceed:

(1) For Classes TF, T3, T8 engines greater than 26.7 kilonewtons (6000 pounds) rated output:

(i) Engines manufactured on or after January 1, 1984:

Hydrocarbons: 19.6 grams/kilonewton r0.

(ii) Engines manufactured on or after July 7, 1997.

Carbon Monoxide: 118 grams/kilonewton r0.

(iii) Engines of a type or model of which the date of manufacture of the first individual production model was on or before December 31, 1995, and for which the date of manufacture of the individual engine was on or before December 31, 1999:

Oxides of Nitrogen: $(40+2(rPR))$ grams/kilonewtons r0.

(iv) Engines of a type or model of which the date of manufacture of the first individual production model was after December 31, 1995, or for which the date of manufacture of the individual engine was after December 31, 1999:

Oxides of Nitrogen: $(32+1.6(rPR))$ grams/kilonewtons r0.

(v) The emission standards prescribed in paragraphs (d)(1)(iii) and (iv) of this section apply as prescribed beginning July 7, 1997.

(2) For Class TSS Engines manufactured on or after January 1, 1984:

Hydrocarbons= $140(0.92)^{rPR}$ grams/kilonewtons r0.

(e) Smoke exhaust emissions from each gas turbine engine of the classes specified below shall not exceed:

(1) Class TF of rated output less than 26.7 kilonewtons (6000 pounds) manufactured on or after August 9, 1985

$SN=83.6(rO)^{-0.274}$ (rO is in kilonewtons) not to exceed a maximum of SN=50.

(2) Classes T3, T8, TSS, and TF of rated output equal to or greater than 26.7 kilonewtons (6000 pounds) manufactured on or after January 1, 1984

$SN=83.6(rO)^{-0.274}$ (rO is in kilonewtons) not to exceed a maximum of SN=50.

(3) For Class TP of rated output equal to or greater than 1,000 kilowatts