Environmental Protection Agency

CO Carbon Monoxide

CO₂ Carbon dioxide.

FAA Federal Aviation Administration Department of Transportation HC Hydrocarbon(s)

hr. Hour(s)

LTO Landing takeoff

min. Minute(s)

 NO_X Oxides of nitrogen

rO Rated output

rPR Rated pressure ratio

sec. Seconds

SP Shaft power

SN Smoke number

Temperature, degrees Kelvin т

TIM Time in mode

W Watt(s)

Degree

% Percent

 $[47\ {\rm FR}\ 58470,\ {\rm Dec.}\ 30,\ 1982,\ {\rm as}\ {\rm amended}\ {\rm at}\ 49$ FR 31875, Aug. 9, 1984; 62 FR 25365, May 8, 1997; 74 FR 56374, Oct. 30, 2009]

EFFECTIVE DATE NOTE: At 77 FR 36381, June 18, 2012, §87.2 was revised, effective July 18, 2012. For the convenience of the user, the revised text is set forth as follows:

§87.2 Abbreviations.

The abbreviations used in this part have the following meanings:

% percent

degree

CO carbon monoxide

 CO_2 carbon dioxide

g gram

HC hydrocarbon(s) kN kilonewton

kW kilowatt

LTO landing and takeoff

NO_x oxides of nitrogen

rO rated output

rPR rated pressure ratio

SN smoke number

§87.3 General requirements.

(a) This part provides for the approval or acceptance by the Administrator or the Secretary of testing and sampling methods, analytical, techniques, and related equipment not identical to those specified in this part. Before either approves or accepts any such alternate, equivalent, or otherwise nonidentical procedures or equipment, the Administrator or the Secretary shall consult with the other in determining whether or not the action requires rulemaking under sections 231 and 232 of the Clean Air Act, as amended, consistent with the Administrator's and the Secretary's responsibilities under sections 231 and 232 of the Act. (42 U.S.C. 7571, 7572).

(b) Under section 232 of the Act, the Secretary issues regulations to insure compliance with this part.

(c) With respect to aircraft of foreign registry, these regulations shall apply in a manner consistent with any obligation assumed by the United States in any treaty, convention or agreement between the United States and any foreign country or foreign countries.

EFFECTIVE DATE NOTE: At 77 FR 36381, June 18, 2012, §87.3 was revised, effective July 18, 2012. For the convenience of the user, the revised text is set forth as follows:

§87.3 General applicability and requirements.

(a) The regulations of this part apply to engines on all aircraft that are required to be certificated by FAA under 14 CFR part 33 except as specified in this paragraph (a). These regulations do not apply to the following aircraft engines:

(1) Reciprocating engines (including engines used in ultralight aircraft).

(2) Turboshaft engines such as those used in helicopters.

(3) Engines used only in aircraft that are not airplanes. For purposes of this paragraph (a)(3), "airplane" means a fixed-wing aircraft that is heavier than air.

(4) Engines not used for propulsion.

(b) Under section 232 of the Act, the Secretary of Transportation issues regulations to ensure compliance with the standards and related requirements of this part (42 U.S.C. 7572).

(c) The Secretary of Transportation shall apply these regulations to aircraft of foreign registry in a manner consistent with obligations assumed by the United States in any treaty, convention or agreement between the United States and any foreign country or foreign countries.

(d) No State or political subdivision of a State may adopt or attempt to enforce any aircraft or aircraft engine standard respecting emissions unless the standard is identical to a standard applicable to such aircraft under this part (including prior-tier standards applicable to exempt engines).

§87.4 [Reserved]

§87.5 Special test procedures.

The Administrator or the Secretary may, upon written application by a manufacturer or operator of aircraft or aircraft engines, approve test procedures for any aircraft or aircraft engine that is not susceptible to satisfactory testing by the procedures set forth herein. Prior to taking action on any such application, the Administrator or

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the Secretary shall consult with the other.

EFFECTIVE DATE NOTE: At 77 FR 36381, June 18, 2012, §87.5 was removed, effective July 18, 2012.

§87.6 Aircraft safety.

The provisions of this part will be revised if at any time the Secretary determines that an emission standard cannot be met within the specified time without creating a safety hazard.

EFFECTIVE DATE NOTE: At 77 FR 36381, June 18, 2012, §87.6 was revised, effective July 18, 2012. For the convenience of the user, the revised text is set forth as follows:

§87.6 Aircraft safety.

The provisions of this part will be revised if at any time the DOT Secretary determines that an emission standard cannot be met within the specified time without creating a hazard to aircraft safety.

§87.7 Exemptions.

(a) Exemptions based on flights for short durations at infrequent intervals. The emission standards of this part do not apply to engines which power aircraft operated in the United States for short durations at infrequent intervals. Such operations are limited to:

(1) Flights of an aircraft for the purpose of export to a foreign country, including any flights essential to demonstrate the integrity of an aircraft prior to its flight to a point outside the United States.

(2) Flights to a base where repairs, alterations or maintenance are to be performed, or to a point of storage, and flights for the purpose of returning an aircraft to service.

(3) Official visits by representatives of foreign governments.

(4) Other flights the Secretary determines, after consultation with the Administrator, to be for 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 models. The emissions standards of this part do not apply to engines of very low total 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.

(c) Exemptions for New Engines in Other Categories. The emissions standards of this part do not apply to engines for which the Secretary determines, with the concurrence of the Administrator, that application of any standard under §87.21 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.
(5) Other factors which the Secretary, after consultation with the Ad-

retary, after consultation with the Administrator, 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 Secretary determines, with the concurrence of the Administrator, that any applicable standard under §87.11(a), §87.31(a), or §87.31(c), should not be applied based upon consideration of the following:

(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 beyond the control of the owner or operator of the aircraft.

(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.

(4) Applications for a determination that any requirements of §87.11(a), §87.31(a) or §87.31(c) do not apply shall be submitted in duplicate to the Secretary in accordance with procedures established by the Secretary.

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

(f) No state or political subdivision thereof may attempt to enforce a

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