

*Commercial aircraft gas turbine engine* means a turboprop, turbofan, or turbojet commercial aircraft engine.

*Emission measurement system* means all of the equipment necessary to transport and measure the level of emissions. This includes the sample system and the instrumentation system.

*Engine Model* means all commercial aircraft turbine engines which are of the same general series, displacement, and design characteristics and are usually approved under the same type certificate.

*Exhaust emissions* means substances emitted to the atmosphere from the exhaust discharge nozzle of an aircraft or aircraft engine.

*Fuel venting emissions* means raw fuel, exclusive of hydrocarbons in the exhaust emissions, discharged from aircraft gas turbine engines during all normal ground and flight operations.

*In-use aircraft gas turbine engine* means an aircraft gas turbine engine which is in service.

*New aircraft turbine engine* means an aircraft gas turbine engine which has never been in service.

*Power setting* means the power or thrust output of an engine in terms of kilonewtons thrust for turbojet and turbofan engines and shaft power in terms of kilowatts for turboprop engines.

*Rated output (rO)* means the maximum power/thrust available for take-off at standard day conditions as approved for the engine by the Federal Aviation Administration, including re-heat contribution where applicable, but excluding any contribution due to water injection.

*Rated pressure ratio (rPR)* means the ratio between the combustor inlet pressure and the engine inlet pressure achieved by an engine operating at rated output.

*Sample system* means the system which provides for the transportation of the gaseous emission sample from the sample probe to the inlet of the instrumentation system.

*Secretary* means the Secretary of Transportation and any other officer or employee of the Department of Transportation to whom the authority involved may be delegated.

*Shaft power* means only the measured shaft power output of a turboprop engine.

*Smoke* means the matter in exhaust emissions which obscures the transmission of light.

*Smoke number (SN)* means the dimensionless term quantifying smoke emissions.

*Standard day conditions* means standard ambient conditions as described in the United States Standard Atmosphere, 1976, (i.e., Temperature =15 °C, specific humidity =0.00 kg/ H<sub>2</sub> O/kg dry air, and pressure =101325 Pa.)

*Taxi/idle (in)* means those aircraft operations involving taxi and idle between the time of landing roll-out and final shutdown of all propulsion engines.

*Taxi/idle (out)* means those aircraft operations involving taxi and idle between the time of initial starting of the propulsion engine(s) used for the taxi and turn on to duty runway.

[47 FR 58470, Dec. 30, 1982, as amended at 49 FR 31875, Aug. 9, 1984; 62 FR 25365, May 8, 1997]

#### § 87.2 Abbreviations.

The abbreviations used in this part have the following meanings in both upper and lower case:

CO Carbon Monoxide  
 FAA Federal Aviation Administration, Department of Transportation  
 HC Hydrocarbon(s)  
 hr. Hour(s)  
 LTO Landing takeoff  
 min. Minute(s)  
 NO<sub>x</sub> Oxides of nitrogen  
 rO Rated output  
 rPR Rated pressure ratio  
 sec. Seconds  
 SP Shaft power  
 SN Smoke number  
 T Temperature, degrees Kelvin  
 TIM Time in mode  
 W Watt(s)  
 ° Degree  
 % Percent

[47 FR 58470, Dec. 30, 1982, as amended at 49 FR 31875, Aug. 9, 1984; 62 FR 25365, May 8, 1997]

#### § 87.3 General requirements.

(a) This part provides for the approval or acceptance by the Administrator or the Secretary of testing and