

AIRCRAFT ENGINE EMISSION

1. INTRODUCTION

Myanmar is not a state of manufacturer or design and has no capability to measure aircraft engine emission. In pursuance to ICAO Annex 16 Vol-II, engine emission certificate shall be recognized by Myanmar as valid granted by the certificating authority of another Contracting State provided that the requirements under which such certification was granted are not less stringent than the provisions of Annex 16 Volume II.

2. Where the following definition are used in this notice,

Afterburning A mode of engine operation wherein a combustion system fed (in whole or part) by vitiated air is used.

Approach phase The operating phase defined by the time during which the engine is operated in the approach operating mode.

Climb phase. The operating phase defined by the time during which the engine is operated in the climb operating mode.

Date of manufacture. The date of issue of the document attesting that the individual aircraft or engine as appropriate conforms to the requirements of the type or the date of an analogous document.

Derivative version. An aircraft gas turbine engine of the same generic family as an originally type-certificated engine and having features which retain the basic core engine and combustor design of the original model and for which other factors, as judged by the certificating authority, have not changed.

Oxides of nitrogen. The sum of the amounts of the nitric oxide and nitrogen dioxide contained in a gas sample calculated as if the nitric oxide were in the form of nitrogen dioxide.

Rated thrust. For engine emissions purposes, the maximum take-off thrust approved by the certificating authority for use under normal operating conditions at ISA sea level static conditions, and without the use of water injection. Thrust is expressed in kilonewtons.

Reference pressure ratio. The ratio of the mean total pressure at the last compressor discharge plane of the compressor to the mean total pressure at the compressor entry plane when the engine is developing take-off thrust rating in ISA sea level static conditions.

Smoke. The carbonaceous materials in exhaust emissions which obscure the transmission of light.

Smoke Number. The dimensionless term quantifying smoke emissions.

Take-off phase. The operating phase defined by the time during which the engine is operated at the rated thrust.

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Taxi/ground idle. The operating phases involving taxi and idle between the initial starting of the propulsion engine(s) and the initiation of the take-off roll and between the time of runway turn-off and final shutdown of all propulsion engine(s).

Unburned hydrocarbons. The total of hydrocarbon compounds of all classes and molecular weights contained in a gas sample, calculated as if they were in the form of methane.

3. Where the following symbols are used in this notice, they have the meanings ascribed to them below:

CO	Carbon monoxide
D_p	The mass of any gaseous pollutant emitted during the reference emissions landing and take-off cycle
F_n	Thrust in International Standard Atmosphere (ISA), sea level conditions, for the given operating mode
F_{oo}	Rated thrust
F^{*oo}	Rated thrust with afterburning applied
HC	Unburned hydrocarbons (<i>see</i> definition)
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen (<i>see</i> definition)
SN	Smoke Number (<i>see</i> definition)
π_{oo}	Reference pressure ratio (<i>see</i> definition)