



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-5B6/2
UNIQUE ID NUMBER: 2CM019
COMBUSTOR: DAC
ENGINE TYPE: TF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{00}): 24.8
RATED THRUST (F_{00}) (kN): 104.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	6.7	110.6	31.7	4.0
AS % OF ORIGINAL LIMIT	34.0	93.7	35.4	17.1
AS % OF CAEP/2 LIMIT (NO _x)			44.2	
AS % OF CAEP/4 LIMIT (NO _x)			54.0	
AS % OF CAEP/6 LIMIT (NO _x)			61.4	
AS % OF CAEP/8 LIMIT (NO _x)			74.1	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- DEDICATED ENGINES TO PRODUCTION STANDARD
- OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

x OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.998	0.10	4.48	13.51	0.5
CLIMB OUT	85	2.2	0.827	0.20	12.18	10.41	0.5
APPROACH	30	4.0	0.315	0.20	17.75	10.32	3.8
IDLE	7	26.0	0.111	3.40	46.10	3.90	3.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			400	630	10842	3158	-
NUMBER OF ENGINES				4	4	4	4
NUMBER OF TESTS				9	9	9	9
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.8	103.4	30.2	3.7
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				4.58-8.45	97.66-109.78	29.37-31.42	3.1-4.2

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.3-101
TEMPERATURE (K)	288-298
ABS HUMIDITY (kg/kg)	0.01-0.0146

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	18.1

MANUFACTURER: CFM International
TEST ORGANIZATION: SNECMA, Villaroche, France
TEST LOCATION: Techspace Aero, Liege, Belgium
TEST DATES: 19/06/1995-28/07/1995

REMARKS

1. Ref GE Report CR-797/2 Supplement 1.
2. Engine S/N 779172/001, 779174/001, 779175/001, & 779178/001
3. DAC combustor

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)