



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

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

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{oo}): 24.8
RATED OUTPUT (F_{oo}) (kN): 104.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (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 (NOx)			44.2 %	
AS % OF CAEP/4 LIMIT (NOx)			54.0 %	
AS % OF CAEP/6 LIMIT (NOx)			61.4 %	
AS % OF CAEP/8 LIMIT (NOx)			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

MEASURED DATA

MODE	POWER SETTING (% F_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.998	0.1	4.48	13.51	0.5
CLIMB OUT	85	2.2	0.827	0.2	12.18	10.41	0.5
APPROACH	30	4.0	0.315	0.2	17.75	10.32	3.8
IDLE	7	26.0	0.111	3.4	46.1	3.9	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_{oo} (g/kN) or AVERAGE SN (MAX)				5.84	103.35	30.2	3.7
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} 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) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.29-101.01
TEMPERATURE (K)	288-298
ABS HUMIDITY (kg/kg)	.0100-.0146

FUEL

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

MANUFACTURER: CFMI
TEST ORGANIZATION: SNECMA, Villaroche, France
TEST LOCATION: Techspace Aero, Liege, Belgium
TEST DATES: FROM 19 Jun 95 TO 28 Jul 95

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

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)