



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-7B26/2
UNIQUE ID NUMBER: 4CM042
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 27.8
RATED OUTPUT (F_{00}) (kN): 116.99

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	14.2	88.0	38.4	0.7
AS % OF ORIGINAL LIMIT	72.7 %	74.6 %	40.2 %	3.1 %
AS % OF CAEP/2 LIMIT (NOx)			50.2 %	
AS % OF CAEP/4 LIMIT (NOx)			60.5 %	
AS % OF CAEP/6 LIMIT (NOx)			68.7 %	
AS % OF CAEP/8 LIMIT (NOx)			81.7 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.203	0.03	0.77	19.2	0.7
CLIMB OUT	85	2.2	0.989	0.06	2.51	14.77	0.7
APPROACH	30	4.0	0.334	4.73	26.07	7.26	0.7
IDLE	7	26.0	0.113	5.88	39.93	4.27	0.7
LTO TOTAL FUEL (kg) or EMISSIONS (g)			438	1425	9495	4233	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				12.21	81.39	36.24	0.71
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				11.1-13.4	77.1-85.9	36.0-36.8	0.3-1.6

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.9-98.0
TEMPERATURE (K)	292.8-296.7
ABS HUMIDITY (kg/kg)	.00814-.0131

FUEL

SPEC	Jet A
H/C	1.93-1.94
AROM (%)	18.0-19.2

MANUFACTURER: GE
TEST ORGANIZATION: CFM56-7B Eval Engineering
TEST LOCATION: Peebles Test Operation (PTO) Peebles, OH
TEST DATES: FROM 30 Aug 97 TO 12 Sep 97

REMARKS

1. FAA Certification Report CR-997/2, 14 Nov 97
2. Engine S/N 874-136/01, 874-141/01, 874-146/01

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)