

## ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## **SUBSONIC ENGINES**

ENGINE IDENTIFICATION: CFM56-7B26 BYPASS RATIO: 5.1 PRESSURE RATIO  $(\pi_{\circ\circ})$ : 27.61 UNIQUE ID NUMBER: 8CM051 RATED OUTPUT  $(F_{\circ\circ})$  (kN): 116.99 ENGINE TYPE: TF

## REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	4.7	37.2	61.0	18.9
AS % OF ORIGINAL LIMIT	24.0 %	31.5 %	64.0 %	83.4 %
AS % OF CAEP/2 LIMIT (NOx)			80.1 %	
AS % OF CAEP/4 LIMIT (NOx)			96.6 %	
AS % OF CAEP/6 LIMIT (NOx)			109.7 %	
AS % OF CAEP/8 LIMIT (NOx)			130.5 %	

## DATA STATUS

PRE-REGULATION

CERTIFICATION

REVISED (SEE REMARKS)

# EMISSIONS STATUS

DATA CORRECTED TO REFERENCE

(ANNEX 16 VOLUME II)

## TEST ENGINE STATUS

NEWLY MANUFACTURED ENGINES ×

DEDICATED ENGINES TO PRODUCTION STANDARD

OTHER (SEE REMARKS)

#### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

OUT OF PRODUCTION (DATE: - )

OUT OF SERVICE

## MEASURED DATA

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F <sub>00</sub> )						
TAKE-OFF	100	0.7	1.221	0.1	0.2	28.8	14.7
CLIMB OUT	85	2.2	0.999	0.1	0.6	22.5	11.9
APPROACH	30	4.0	0.338	0.1	1.6	10.8	0
IDLE	7	26.0	0.113	1.9	18.8	4.7	0
LTO TOTAL FUEL (kg) or EMISSIONS (g) 441			361	3533	6149	-	
NUMBER OF ENGINES			1	1	1	1	
NUMBER OF TESTS			3	3	3	3	
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)			3.06	30.33	52.64	14.7	
SIGMA ( $D_p/F_{oo}$ in $g/kN$ , or $SN$ )			1	1	1	_	
RANGE $(D_p/F_{oo} \text{ in g/kN, or SN})$			-	-	-	-	

## ACCESSORY LOADS

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

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.8-98.0
TEMPERATURE (K)	294-297
ABS HUMIDITY (kg/kg)	.01000157

## FUEL

SPEC	Jet A
H/C	1.86-1.97
AROM (%)	16.9-17.7

MANUFACTURER:

GE CFM56-7B Eval Engineering TEST ORGANIZATION: TEST ORGANIZATION: Peeples :
FROM Jul 96

Peebles Test Operation, Peebles, Ohio, USA

TO

## REMARKS

1. FAA Certification Report CR-997, Dec 96.

2. Engine S/N 874-101/01

3. Characteristic Dp/Foo NOx incorrectly entered originally [3CM033]

4. Issue 15; Dp/Foo NOx corrected from 63.2 to 61.0 and % of standards to 64.0, 80.1 & 96.6

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

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