



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B7F
UNIQUE ID NUMBER: 2GE054
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 31.79
RATED OUTPUT (F_{00}) (kN): 267.03

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	14.8	59.5	50.0	9.6
AS % OF ORIGINAL LIMIT	75.5 %	50.4 %	48.3 %	53.1 %
AS % OF CAEP/2 LIMIT (NOx)			60.3 %	
AS % OF CAEP/4 LIMIT (NOx)			70.8 %	
AS % OF CAEP/6 LIMIT (NOx)			79.9 %	
AS % OF CAEP/8 LIMIT (NOx)			93.1 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.540	0.07	0.52	32.16	8.2
CLIMB OUT	85	2.2	2.020	0.08	0.52	23.09	5.4
APPROACH	30	4.0	0.640	0.19	1.92	9.06	2.3
IDLE	7	26.0	0.200	9.74	43.89	3.75	3.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			834	3041	13931	12134	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				11.4	52.18	45.43	8.2
SIGMA (D_p/F_{00} in g/kN, or SN)				1.19	2.8	1.98	1.4
RANGE (D_p/F_{00} in g/kN, or SN)				10.37-12.5	49.76-54.85	43.90-47.85	6.3-8.9

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.40-97.82
TEMPERATURE (K)	287-296
ABS HUMIDITY (kg/kg)	.0084-.0140

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: GE Aircraft Engines
TEST ORGANIZATION: CF6 Evaluation Engineering
TEST LOCATION: Site IIIC, PTO, Peebles, Ohio
TEST DATES: FROM 29 May 85 TO 03 Jun 85

REMARKS

1. Ref GE Report R88AEB277 and GE Report R93AE351.
2. Engine S/N's 690105 and 690005/2.

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

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