



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B4
UNIQUE ID NUMBER: 1GE027
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 30.36
RATED OUTPUT (F_{00}) (kN): 254.35

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	15.8	63.6	48.5	8.4
AS % OF ORIGINAL LIMIT	80.7 %	53.9 %	48.1 %	46.1 %
AS % OF CAEP/2 LIMIT (NOx)			60.2 %	
AS % OF CAEP/4 LIMIT (NOx)			71.6 %	
AS % OF CAEP/6 LIMIT (NOx)			81.2 %	
AS % OF CAEP/8 LIMIT (NOx)			95.4 %	

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	2.430	0.08	0.56	29.2	7.2
CLIMB OUT	85	2.2	1.982	0.09	0.54	21.8	4.8
APPROACH	30	4.0	0.650	0.21	2.33	8.9	2.3
IDLE	7	26.0	0.199	9.74	43.91	3.67	3
LTO TOTAL FUEL (kg) or EMISSIONS (g)			830	3088	14193	11211	-
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)				12.15	55.86	44.08	7.2
SIGMA (D_p/F_{00} in g/kN, or SN)				1.27	3.05	2.12	1.1
RANGE (D_p/F_{00} in g/kN, or SN)				11.05-13.3	53.22-58.61	42.30-46.38	5.8-7.7

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 Reports R84AEB152 and R86AEB144 (Rev Aug 86).
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)