



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B2F
UNIQUE ID NUMBER: 2GE046
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 27.6
RATED OUTPUT (F_{00}) (kN): 231.35

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	3.2	33.0	43.7	6.7
AS % OF ORIGINAL LIMIT	16.5 %	28.0 %	45.9 %	35.5 %
AS % OF CAEP/2 LIMIT (NOx)			57.4 %	
AS % OF CAEP/4 LIMIT (NOx)			69.2 %	
AS % OF CAEP/6 LIMIT (NOx)			78.6 %	
AS % OF CAEP/8 LIMIT (NOx)			93.5 %	

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)
- OUT OF PRODUCTION
- 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	2.148	0.05	0.04	21.55	5.7
CLIMB OUT	85	2.2	1.777	0.05	0.06	18.09	3.1
APPROACH	30	4.0	0.593	0.12	2.64	11.8	0
IDLE	7	26.0	0.188	1.86	21.56	4.52	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			760	579	6717	9192	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				2.49	29	39.73	5.7
SIGMA (D_p/F_{00} in g/kN, or SN)				0.279	1.3	0.24	0.61
RANGE (D_p/F_{00} in g/kN, or SN)				2.3-2.89	27.9-30.7	39.5-40.1	5.0-6.4

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.61-98.15
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	.00457-.00743

FUEL

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

MANUFACTURER: GE
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: Site IIIB, PTO Peebles
TEST DATES: FROM 13 Jan 95 TO 17 Jan 95

REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor
4. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
5. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e)

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