



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B4F
UNIQUE ID NUMBER: 2GE047
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 30.22
RATED OUTPUT (F_{oo}) (kN): 254.79

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	2.6	28.2	48.1	8.1
AS % OF ORIGINAL LIMIT	13.3 %	23.9 %	47.8 %	44.2 %
AS % OF CAEP/2 LIMIT (NOx)			59.8 %	
AS % OF CAEP/4 LIMIT (NOx)			71.3 %	
AS % OF CAEP/6 LIMIT (NOx)			80.9 %	
AS % OF CAEP/8 LIMIT (NOx)			95.1 %	

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)
- OUT OF PRODUCTION
- OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (% F_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
TAKE-OFF	100	0.7	2.432	0.05	0.04	25.08	6.9
CLIMB OUT	85	2.2	1.983	0.05	0.04	19.72	4.5
APPROACH	30	4.0	0.650	0.11	2.13	12.47	0
IDLE	7	26.0	0.199	1.54	19.23	4.73	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			830	513	6317	11137	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				2	24.73	43.7	6.9
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.223	1.19	0.29	0.64
RANGE (D_p/F_{oo} in g/kN, or SN)				1.86-2.36	23.6-26.5	43.3-44.0	6.2-7.7

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)