



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2D1F
UNIQUE ID NUMBER: 2GE049
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 32.05
RATED OUTPUT (F_{00}) (kN): 269.96

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	2.3	25.7	51.8	8.2
AS % OF ORIGINAL LIMIT	11.7 %	21.8 %	49.8 %	45.5 %
AS % OF CAEP/2 LIMIT (NOx)			62.2 %	
AS % OF CAEP/4 LIMIT (NOx)			72.9 %	
AS % OF CAEP/6 LIMIT (NOx)			82.2 %	
AS % OF CAEP/8 LIMIT (NOx)			95.5 %	

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)
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	2.629	0.04	0.05	28.12	7
CLIMB OUT	85	2.2	2.126	0.05	0.04	21.3	5.5
APPROACH	30	4.0	0.688	0.11	1.9	12.66	0
IDLE	7	26.0	0.205	1.38	18.02	4.85	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			876	478	6093	12724	-
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)				1.76	22.53	47.13	7
SIGMA (D_p/F_{00} in g/kN, or SN)				0.196	1.21	0.581	0.908
RANGE (D_p/F_{00} in g/kN, or SN)				1.62-2.07	21.3-24.2	46.5-47.9	6.1-8.3

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

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