



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2A3
UNIQUE ID NUMBER: 2GE038
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 31.09
RATED OUTPUT (F_{oo}) (kN): 262.22

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	2.6	28.0	50.6	8.1
AS % OF ORIGINAL LIMIT	13.2 %	23.7 %	49.5 %	44.5 %
AS % OF CAEP/2 LIMIT (NOx)			61.9 %	
AS % OF CAEP/4 LIMIT (NOx)			73.2 %	
AS % OF CAEP/6 LIMIT (NOx)			82.8 %	
AS % OF CAEP/8 LIMIT (NOx)			96.8 %	

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_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.516	0.04	0.06	27.68	6.9
CLIMB OUT	85	2.2	2.041	0.05	0.04	21.05	5
APPROACH	30	4.0	0.662	0.11	1.98	12.48	0
IDLE	7	26.0	0.203	1.54	19.32	4.72	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			851	523	6450	12074	-
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)				1.99	24.58	46.03	6.9
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.22	1.19	0.56	0.91
RANGE (D_p/F_{oo} in g/kN, or SN)				1.85-2.34	23.4-26.3	45.5-46.8	5.8-8.0

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 % CORE FLOW

AT - POWER SETTINGS
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)