



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80E1A4
UNIQUE ID NUMBER: 4GE081
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 34.5
RATED OUTPUT (F_{00}) (kN): 297.44

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	1.4	20.3	53.5	6.5
AS % OF ORIGINAL LIMIT	7.1 %	17.2 %	49.1 %	37.0 %
AS % OF CAEP/2 LIMIT (NOx)			61.4 %	
AS % OF CAEP/4 LIMIT (NOx)			70.4 %	
AS % OF CAEP/6 LIMIT (NOx)			78.7 %	
AS % OF CAEP/8 LIMIT (NOx)			90.5 %	

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	2.904	0.04	0.04	31.28	5.9
CLIMB OUT	85	2.2	2.337	0.04	0.02	23.54	5.5
APPROACH	30	4.0	0.744	0.09	1.44	12.66	0
IDLE	7	26.0	0.227	0.92	15.05	4.77	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			963	359	5598	15027	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				7	7	7	7
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				1.2	18.81	50.52	5.9
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				-	-	-	-

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 Evaluation Engineering
TEST LOCATION: Site IIIB, PTO, Ohio
TEST DATES: FROM 13 Jan 96 TO 16 Mar 96

REMARKS

1. Ref GE Report TM95-17 & GEAE R95AEB272-2.
2. Engine S/N 704/233, 704/234 & 704/378
3. Low emissions combustor

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)