



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80E1A3
UNIQUE ID NUMBER: 5GE085
COMBUSTOR: Standard
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 35.7
RATED THRUST (F_{00}) (kN): 304.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	12.6	46.7	65.8	10.8
AS % OF ORIGINAL LIMIT	64.3	39.6	59.1	61.9
AS % OF CAEP/2 LIMIT (NO _x)			73.8	
AS % OF CAEP/4 LIMIT (NO _x)			83.9	
AS % OF CAEP/6 LIMIT (NO _x)			93.5	
AS % OF CAEP/8 LIMIT (NO _x)			107.0	

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 (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	2.989	0.07	0.34	45.63	10.1
CLIMB OUT	85	2.2	2.387	0.07	0.31	31.74	8.6
APPROACH	30	4.0	0.755	0.18	1.23	10.29	0.0
IDLE	7	26.0	0.227	9.53	37.02	4.69	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			976	3438	13473	19254	-
NUMBER OF ENGINES				6	6	6	6
NUMBER OF TESTS				11	11	11	11
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				11.3	44.2	63.2	10.1
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)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98.2
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	0.00457-0.00743

FUEL

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

MANUFACTURER: General Electric Company
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: Site IIIB, PTO Peebles
TEST DATES: 13/01/1995-17/01/1995

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

REMARKS

1. Ref. GE Reports R84AEB152, R90AEB188, R95AEB272-2
2. Standard combustor
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)