



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B1F BYPASS RATIO: 5.1
UNIQUE ID NUMBER: 1GE024 PRESSURE RATIO (π_{00}): 30.13
ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 254.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	16.0	63.9	45.5	8.3
AS % OF ORIGINAL LIMIT	81.7 %	54.2 %	45.4 %	45.4 %
AS % OF CAEP/2 LIMIT (NOx)			56.7 %	
AS % OF CAEP/4 LIMIT (NOx)			67.7 %	
AS % OF CAEP/6 LIMIT (NOx)			76.8 %	
AS % OF CAEP/8 LIMIT (NOx)			90.3 %	

DATA STATUS

- PRE-REGULATION
- CERTIFICATION
x 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	2.341	0.08	0.52	27.73	7.1
CLIMB OUT	85	2.2	1.901	0.09	0.52	21.07	4.8
APPROACH	30	4.0	0.621	0.2	2.21	9	2.3
IDLE	7	26.0	0.199	9.88	44.32	3.78	3
LTO TOTAL FUEL (kg) or EMISSIONS (g)			809	3127	14270	10528	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				12.3	56.09	41.38	7.1
SIGMA (D_p/F_{00} in g/kN, or SN)				1.25	3	1.98	1.1
RANGE (D_p/F_{00} in g/kN, or SN)				11.22-13.48	53.51-58.88	39.83-43.77	5.7-7.5

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.40-97.82
TEMPERATURE (K)	287 - 296
ABS HUMIDITY (kg/kg)	.0084-.0140

FUEL

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

MANUFACTURER: GE Aircraft Engines
TEST ORGANIZATION: CF6 Evaluation Engineering
TEST LOCATION: Site IIIC, PTO, Peebles, Ohio
TEST DATES: FROM 29 May 85 TO 03 Jun 85

REMARKS

1. Ref GE Report R87AEB208 Rev A. (Jan 88).
2. Engine S/N's 690105 and 690005/2.

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

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