



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B2F
UNIQUE ID NUMBER: 1GE026
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 27.52
RATED OUTPUT (F_{oo}) (kN): 231.35

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	19.5	73.5	39.7	6.7
AS % OF ORIGINAL LIMIT	99.5 %	62.3 %	41.8 %	35.5 %
AS % OF CAEP/2 LIMIT (NOx)			52.3 %	
AS % OF CAEP/4 LIMIT (NOx)			63.0 %	
AS % OF CAEP/6 LIMIT (NOx)			71.6 %	
AS % OF CAEP/8 LIMIT (NOx)			85.1 %	

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	2.071	0.08	0.52	23.56	7.5
CLIMB OUT	85	2.2	1.702	0.09	0.52	18.32	3.6
APPROACH	30	4.0	0.559	0.23	2.93	8.54	2.4
IDLE	7	26.0	0.185	11.8	49.75	3.64	2.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			735	3467	14928	8361	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				14.99	64.51	36.14	5.7
SIGMA (D_p/F_{oo} in g/kN, or SN)				1.24	2.89	1.7	1
RANGE (D_p/F_{oo} in g/kN, or SN)				13.96-16.3	62.01-67.13	34.80-36.75	4.4-6.1

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 R88AEB277.
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)