



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B4F BYPASS RATIO: 5.1
UNIQUE ID NUMBER: 1GE028 PRESSURE RATIO (π_{oo}): 30.17
ENGINE TYPE: TF RATED OUTPUT (F_{oo}) (kN): 254.79

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	16.2	63.7	45.9	8.6
AS % OF ORIGINAL LIMIT	82.8 %	54.0 %	45.7 %	46.7 %
AS % OF CAEP/2 LIMIT (NOx)			57.2 %	
AS % OF CAEP/4 LIMIT (NOx)			68.1 %	
AS % OF CAEP/6 LIMIT (NOx)			77.4 %	
AS % OF CAEP/8 LIMIT (NOx)			91.0 %	

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

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	2.359	0.08	0.52	28.72	7.3
CLIMB OUT	85	2.2	1.907	0.09	0.52	21.32	4.7
APPROACH	30	4.0	0.614	0.2	2.21	8.88	2.3
IDLE	7	26.0	0.193	10.37	45.74	3.71	2.3
LTO TOTAL FUEL (kg) or EMISSIONS (g)			799	3176	14251	10635	-
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)				12.47	55.95	41.73	7.3
SIGMA (D_p/F_{oo} in g/kN, or SN)				1.19	2.85	1.9	1.1
RANGE (D_p/F_{oo} in g/kN, or SN)				11.44-13.52	53.49-58.62	40.25-44.03	5.9-7.8

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)