



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

**** DATA SUPERSEDED ** SEE SHEET: 1GE018**

ENGINE IDENTIFICATION: CF6-80C2A3 BYPASS RATIO: 5.1
UNIQUE ID NUMBER: 1GE017 PRESSURE RATIO (π_{00}): 31.64
ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 262.22

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	14.7	60.0	54.9	9.1
AS % OF ORIGINAL LIMIT	75.0 %	50.9 %	53.1 %	50.3 %
AS % OF CAEP/2 LIMIT (NOx)			66.4 %	
AS % OF CAEP/4 LIMIT (NOx)			78.1 %	
AS % OF CAEP/6 LIMIT (NOx)			88.2 %	
AS % OF CAEP/8 LIMIT (NOx)			102.8 %	

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	2.457	0.08	0.59	34.44	7.8
CLIMB OUT	85	2.2	2.003	0.1	0.57	25.45	5.1
APPROACH	30	4.0	0.649	0.21	2.15	10.01	2.3
IDLE	7	26.0	0.202	9.21	42.18	3.96	3
LTO TOTAL FUEL (kg) or EMISSIONS (g)			838	2970	13838	13090	-
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)				11.3	52.67	49.91	7.8
SIGMA (D_p/F_{00} in g/kN, or SN)				1.29	3.03	0.4	1.3
RANGE (D_p/F_{00} in g/kN, or SN)				9.85-12.32	49.18-54.56	49.63-50.42	6.3-8.6

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 R86AEB143.
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)