ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2A5
UNIQUE ID NUMBER: 2GE039
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 31.66
RATED OUTPUT (F_{oo}) (kN): 267.34

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	2.5	27.1	52.0	8.1
AS % OF ORIGINAL LIMIT	12.6 %	23.0 %	50.3 %	44.8 %
AS % OF CAEP/2 LIMIT (NOx)			62.9 %	
AS % OF CAEP/4 LIMIT (NOx)			73.9 %	
AS % OF CAEP/6 LIMIT (NOx)			83.5 %	
AS % OF CAEP/8 LIMIT (NOx)			97.3 %	

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) HC	CO	NOx	SMOKE NUMBER
TAKE-OFF	100	0.7	2.580	0.04	0.06	28.57	6.94
CLIMB OUT	85	2.2	2.096	0.05	0.04	21.69	5.4
APPROACH	30	4.0	0.672	0.11	1.91	12.53	0
IDLE	7	26.0	0.205	1.48	18.89	4.76	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			866	509	6367	12640	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				1.9	23.78	47.28	6.9
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.209	1.96	0.5	0.91
RANGE (D_p/F_{oo} in g/kN, or SN)				1.76-2.24	22.6-25.5	46.7-47.9	5.9-8.2

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.61-98.15
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	.00457-.00743

FUEL

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

MANUFACTURER: GE
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: Site IIIB, PTO Peebles
TEST DATES: FROM 13 Jan 95 TO 17 Jan 95

REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)