ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-45A2
UNIQUE ID NUMBER: 1GE005
ENGINE TYPE: TF

BYPASS RATIO: 4.3
PRESSURE RATIO (π_{oo}): 25.9
RATED OUTPUT (F_{oo}) (kN): 202.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	44.2	107.7	56.5	4.9
AS % OF ORIGINAL LIMIT	225.3 %	91.3 %	61.6 %	25.2 %
AS % OF CAEP/2 LIMIT (NOx)			77.0 %	
AS % OF CAEP/4 LIMIT (NOx)			93.5 %	
AS % OF CAEP/6 LIMIT (NOx)			106.3 %	
AS % OF CAEP/8 LIMIT (NOx)			127.4 %	

DATA STATUS

x PRE-REGULATION
- 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	2.058	0.7	0.5	31	2.9
CLIMB OUT	85	2.2	1.716	0.7	0.5	26.2	2.2
APPROACH	30	4.0	0.583	1.1	7.5	8.4	2.9
IDLE	7	26.0	0.200	26	66	3.3	4.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			765	8485	21798	10819	-
NUMBER OF ENGINES				6	6	6	6
NUMBER OF TESTS				6	6	6	6
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				39.7	102	54.3	4.6
SIGMA (D_p/F_{oo} in g/kN, or SN)				3.8	4.6	0.5	1.5
RANGE (D_p/F_{oo} in g/kN, or SN)				-	-	-	-

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.3-100.4
TEMPERATURE (K)	270 - 296
ABS HUMIDITY (kg/kg)	.0027-.0103

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	17.1

MANUFACTURER: GE Aircraft Engines
TEST ORGANIZATION: Production Engine Test
TEST LOCATION: Production Test Cells M34 & M35
TEST DATES: FROM 12 Oct 79 TO 05 Dec 79

REMARKS

1. Ref Report no FAA-EE-80-27 (GE Report R80AEG420)

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