ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-50E2   BYPASS RATIO: 4.3
UNIQUE ID NUMBER: 1GE009   PRESSURE RATIO (π_{oo}):   29.8
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN):   230.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	37.3	99.0	64.3	4.8
AS % OF ORIGINAL LIMIT	190.1 %	83.9 %	64.6 %	25.5 %
AS % OF CAEP/2 LIMIT (NOx)			80.7 %	
AS % OF CAEP/4 LIMIT (NOx)			96.5 %	
AS % OF CAEP/6 LIMIT (NOx)			109.7 %	
AS % OF CAEP/8 LIMIT (NOx)			129.0 %	

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	2.487	0.6	0.5	36.3	4.1
CLIMB OUT	85	2.2	1.975	0.7	0.5	29.7	2.7
APPROACH	30	4.0	0.660	1	4.3	9.5	2.7
IDLE	7	26.0	0.215	21.8	61.8	3.6	4.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			859	7715	21591	14247	–
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)				33.5	93.7	61.8	4.5
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)