



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-50C
UNIQUE ID NUMBER: 1GE006
ENGINE TYPE: TF

BYPASS RATIO: 4.3
PRESSURE RATIO (π_{oo}): 28.8
RATED OUTPUT (F_{oo}) (kN): 224.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	39.2	100.5	62.7	4.8
AS % OF ORIGINAL LIMIT	199.8 %	85.1 %	64.2 %	25.3 %
AS % OF CAEP/2 LIMIT (NOx)			80.3 %	
AS % OF CAEP/4 LIMIT (NOx)			96.3 %	
AS % OF CAEP/6 LIMIT (NOx)			109.4 %	
AS % OF CAEP/8 LIMIT (NOx)			129.5 %	

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)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.379	0.6	0.5	35	3.9
CLIMB OUT	85	2.2	1.915	0.7	0.5	29	2.6
APPROACH	30	4.0	0.643	1	5.2	9.4	2.8
IDLE	7	26.0	0.212	23	62.3	3.5	4.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			838	7998	21583	13436	-
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)				35.2	95.1	60.2	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)