



# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-50C1, -C2  
UNIQUE ID NUMBER: 1GE007  
ENGINE TYPE: TF

BYPASS RATIO: 4.3  
PRESSURE RATIO ( $\pi_{oo}$ ): 29.8  
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)			SMOKE NUMBER
				HC	CO	NOx	
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)