



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

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

BYPASS RATIO: 4.3
PRESSURE RATIO (π_{00}): 25.9
RATED THRUST (F_{00}) (kN): 202.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (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 (NO _x)			77.0	
AS % OF CAEP/4 LIMIT (NO _x)			93.5	
AS % OF CAEP/6 LIMIT (NO _x)			106.3	
AS % OF CAEP/8 LIMIT (NO _x)			127.4	

DATA STATUS

x PRE-REGULATION
- CERTIFICATION
x 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 (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.058	0.70	0.50	31.00	2.9
CLIMB OUT	85	2.2	1.716	0.70	0.50	26.20	2.2
APPROACH	30	4.0	0.583	1.10	7.50	8.40	2.9
IDLE	7	26.0	0.200	26.00	66.00	3.30	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 ₀₀ (g/kN) or AVERAGE SN (MAX)				39.7	102.0	54.3	4.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)				3.8	4.6	0.5	1.5
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.3-100.4
TEMPERATURE (K)	270-296
ABS HUMIDITY (kg/kg)	0.0027-0.0103

FUEL

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

MANUFACTURER: General Electric Company
TEST ORGANIZATION: Production Engine Test
TEST LOCATION: Production Test Cells M34 & M35
TEST DATES: 12/10/1979-05/12/1979

REMARKS

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

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)