



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-94B
UNIQUE ID NUMBER: 9GE128
COMBUSTOR: PEC
ENGINE TYPE: TF

BYPASS RATIO: 8.3
PRESSURE RATIO (π_{00}): 40.8
RATED THRUST (F_{00}) (kN): 430.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	4.1	38.4	76.8	3.9
AS % OF ORIGINAL LIMIT	20.7	32.6	63.1	24.7
AS % OF CAEP/2 LIMIT (NO _x)			78.9	
AS % OF CAEP/4 LIMIT (NO _x)			86.6	
AS % OF CAEP/6 LIMIT (NO _x)			95.3	
AS % OF CAEP/8 LIMIT (NO _x)			107.0	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
x 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)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	3.513	0.04	0.30	51.33	3.0
CLIMB OUT	85	2.2	2.831	0.03	0.31	40.63	1.0
APPROACH	30	4.0	0.876	0.06	1.74	15.81	1.0
IDLE	7	26.0	0.284	2.49	29.23	5.55	0.8
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1175	1136	13495	28540	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				2.6	31.3	66.2	3.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.3	1.1	0.5	0.9
RANGE (D _p /F ₀₀ in g/kN, or SN)				2.47-2.92	30.53-32.59	65.71-66.76	2.27-3.95

ACCESSORY LOADS

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

AT All POWER SETTINGS
AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.4-98.7
TEMPERATURE (K)	277.2-281.3
ABS HUMIDITY (kg/kg)	0.0015-0.0043

FUEL

SPEC	Jet A-1
H/C	
AROM (%)	15-16

MANUFACTURER: General Electric Company
TEST ORGANIZATION: General Electric Peebles Test Operation
TEST LOCATION: Site 6A
TEST DATES: 30/11/2007-08/12/2007

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

REMARKS

1. GE Aviation Report R2007AE851
2. Engine serial number 900-505/1
3. Turbomachinery incorporating 3D aero
4. Performance Enhanced Combustor (PEC)
5. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
6. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)