



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-76B
UNIQUE ID NUMBER: 6GE087
COMBUSTOR: DAC II
ENGINE TYPE: TF

BYPASS RATIO: 8.5
PRESSURE RATIO (π_{00}): 34.9
RATED THRUST (F_{00}) (kN): 360.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	1.1	23.4	62.4	3.7
AS % OF ORIGINAL LIMIT	5.4	19.8	56.8	22.4
AS % OF CAEP/2 LIMIT (NO _x)			71.0	
AS % OF CAEP/4 LIMIT (NO _x)			81.2	
AS % OF CAEP/6 LIMIT (NO _x)			90.7	
AS % OF CAEP/8 LIMIT (NO _x)			104.2	

DATA STATUS

- PRE-REGULATION
x 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 (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	2.781	0.04	0.12	40.41	2.8
CLIMB OUT	85	2.2	2.280	0.03	0.15	31.77	1.8
APPROACH	30	4.0	0.763	0.06	1.58	15.09	2.9
IDLE	7	26.0	0.267	0.52	15.66	5.64	2.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1017	241	6871	19394	-
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)				0.7	19.1	53.8	2.9
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.1	0.5	0.2	0.4
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.61-0.71	18.53-19.39	53.61-53.98	2.59-3.23

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.3-98.2
TEMPERATURE (K)	279.1-281.6
ABS HUMIDITY (kg/kg)	0.0022-0.0064

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	17.4

MANUFACTURER: General Electric Company
TEST ORGANIZATION: GE90 Eval Engineering
TEST LOCATION: Site IIID, PTO, Peebles, OH
TEST DATES: 09/01/2000-12/01/2000

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. Ref. GE Report R97AEB298,
2. Engine S/N 900326
3. Turbomachinery incorporating 3D aero
4. Characteristic D_p/F₀₀ NO_x incorrectly entered originally [6GE091]
5. Issue 15: D_p/F₀₀ NO_x corrected from 83.2 to 82.0 and % of standards recalculated as well
6. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
7. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements:

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