



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-90B
UNIQUE ID NUMBER: 3GE060
COMBUSTOR: DAC I
ENGINE TYPE: TF

BYPASS RATIO: 8.4
PRESSURE RATIO (π_{00}): 39.7
RATED THRUST (F_{00}) (kN): 418.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	4.7	58.2	74.6	10.5
AS % OF ORIGINAL LIMIT	24.0	49.3	62.5	65.6
AS % OF CAEP/2 LIMIT (NO _x)			78.1	
AS % OF CAEP/4 LIMIT (NO _x)			86.3	
AS % OF CAEP/6 LIMIT (NO _x)			95.2	
AS % OF CAEP/8 LIMIT (NO _x)			107.3	

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	3.419	0.08	0.08	57.34	0.0
CLIMB OUT	85	2.2	2.756	0.07	0.11	43.92	0.0
APPROACH	30	4.0	0.884	1.34	23.48	10.62	0.0
IDLE	7	26.0	0.313	2.77	35.79	6.11	9.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1208	1674	22509	29448	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				4.0	53.8	70.4	9.5
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				3.82-4.22	51-55.7	69.1-73	9-9.5

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-98.6
TEMPERATURE (K)	274-299
ABS HUMIDITY (kg/kg)	0.001-0.0073

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	17.2

MANUFACTURER: General Electric Company
TEST ORGANIZATION: GE90 Eval Engineering
TEST LOCATION: Site IVD & 6, PTO, Peebles, Ohio
TEST DATES: 24/02/1995-28/07/1995

REMARKS

1. GE Report TM95-17.
2. Engine S/N 704/223 & 704/234
3. DAC I combustor

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