



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-85B
UNIQUE ID NUMBER: 3GE064
COMBUSTOR: DAC II
ENGINE TYPE: TF

BYPASS RATIO: 8.4
PRESSURE RATIO (π_{o0}): 38.0
RATED THRUST (F_{o0}) (kN): 395.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{o0} (g/kN) or SN	0.7	17.9	65.6	0.6
AS % OF ORIGINAL LIMIT	3.6	15.2	56.6	3.7
AS % OF CAEP/2 LIMIT (NO _x)			70.7	
AS % OF CAEP/4 LIMIT (NO _x)			79.0	
AS % OF CAEP/6 LIMIT (NO _x)			87.5	
AS % OF CAEP/8 LIMIT (NO _x)			99.2	

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 _{o0})	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	3.169	0.04	0.15	47.28	1.8
CLIMB OUT	85	2.2	2.583	0.04	0.16	35.70	1.8
APPROACH	30	4.0	0.852	0.07	1.10	16.73	1.8
IDLE	7	26.0	0.292	0.45	13.67	5.69	1.8
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1134	238	6526	24478	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				5	5	5	5
AVERAGE D _p /F _{o0} (g/kN) or AVERAGE SN (MAX)				0.6	16.5	61.9	
SIGMA (D _p /F _{o0} in g/kN, or SN)							
RANGE (D _p /F _{o0} in g/kN, or SN)				0.3-0.92	14.4-18.4	57.9-65.3	0-1.92

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.5-98.6
TEMPERATURE (K)	283-301
ABS HUMIDITY (kg/kg)	0.0036-0.0151

FUEL

SPEC	Jet A
H/C	1.91-1.94
AROM (%)	18.1-19.3

MANUFACTURER: General Electric Company
TEST ORGANIZATION: GE90 Eval Engineering
TEST LOCATION: Site IIID, PTO, Peebles, Ohio
TEST DATES: 24/04/1997-19/06/1997

REMARKS

1. GE Report R96AEB292.
2. Engine S/S 900-173, 900-166 & 900-167
3. DAC II combustor

Compliance with Fuel Venting requirements:

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