



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-85B
UNIQUE ID NUMBER: 2GE053
ENGINE TYPE: TF

BYPASS RATIO: 8.4
PRESSURE RATIO (π_{00}): 38.1
RATED OUTPUT (F_{00}) (kN): 395.31

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	5.3	63.3	68.9	10.8
AS % OF ORIGINAL LIMIT	26.9 %	53.7 %	59.3 %	66.4 %
AS % OF CAEP/2 LIMIT (NOx)			74.2 %	
AS % OF CAEP/4 LIMIT (NOx)			82.8 %	
AS % OF CAEP/6 LIMIT (NOx)			91.7 %	
AS % OF CAEP/8 LIMIT (NOx)			103.9 %	

DATA STATUS

- 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

MEASURED DATA

MODE	POWER SETTING (% F_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
TAKE-OFF	100	0.7	3.190	0.08	0.08	52.01	0
CLIMB OUT	85	2.2	2.600	0.07	0.12	40.27	0
APPROACH	30	4.0	0.850	1.52	25.35	10.3	0
IDLE	7	26.0	0.300	3.05	37.83	6.01	9.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1149	1772	22928	25703	-
NUMBER OF ENGINES			3	3	3	3	3
NUMBER OF TESTS			3	3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)			4.52	58.54	65.08	9.8	
SIGMA (D_p/F_{00} in g/kN, or SN)			-	-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)			4.27-4.79	55.8-60.2	63.8-67.5	9.2-9.8	

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.38-98.59
TEMPERATURE (K)	274-299
ABS HUMIDITY (kg/kg)	.001-.00726

FUEL

SPEC	Jet A
H/C	1.91-1.92
AROM (%)	15.9-18.6

MANUFACTURER: GE
TEST ORGANIZATION: GE90 Eval Engineering
TEST LOCATION: Site IVD and 6, PTO, Peebles
TEST DATES: FROM 24 Feb 95 TO 28 Jul 95

REMARKS

1. Ref GE Report TM95-45.
2. Engine S/N 900-108, 900-111 & 900-114.
3. Post certification/ as delivered to service.
4. Smoke <3 below meas. capability.
5. DAC I combustor

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)