



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-76B BYPASS RATIO: 8.6
 UNIQUE ID NUMBER: 3GE062 PRESSURE RATIO (π_{00}): 35.1
 ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 360.62

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.9	21.1	57.8	0.6
AS % OF ORIGINAL LIMIT	4.6 %	17.9 %	52.5 %	3.6 %
AS % OF CAEP/2 LIMIT (NOx)			65.6 %	
AS % OF CAEP/4 LIMIT (NOx)			74.9 %	
AS % OF CAEP/6 LIMIT (NOx)			83.6 %	
AS % OF CAEP/8 LIMIT (NOx)			95.8 %	

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

MEASURED DATA

MODE	POWER SETTING (% F_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.824	0.04	0.15	40.11	2
CLIMB OUT	85	2.2	2.311	0.04	0.17	31.59	1.8
APPROACH	30	4.0	0.781	0.07	1.32	15.55	1.8
IDLE	7	26.0	0.280	0.57	15.41	5.43	1.8
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1048	279	7048	19680	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				5	5	5	5
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				0.77	19.55	54.58	0
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				0.45-1.08	17.1-21.6	50.5-57.3	0.0-1.93

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.52-98.62
TEMPERATURE (K)	283-301
ABS HUMIDITY (kg/kg)	.0036-.0151

FUEL

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

MANUFACTURER: GE
 TEST ORGANIZATION: GE90 Eval Engineering
 TEST LOCATION: Site IIID, PTO, Peebles, Ohio, USA
 TEST DATES: FROM 24 Apr 97 TO 19 Jun 97

REMARKS

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

If REVISED, this data supersedes databank UID
 Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)