

ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-92B BYPASS RATIO: 8.4 PRESSURE RATIO $(\pi_{\circ\circ})$: 40.4 3GE061 UNIQUE ID NUMBER: RATED OUTPUT $(F_{\circ\circ})$ (kN): 426.72 ENGINE TYPE: TF

REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	4.4	55.5	77.4	10.5
AS % OF ORIGINAL LIMIT	22.4 %	47.0 %	64.1 %	66.0 %
AS % OF CAEP/2 LIMIT (NOx)			80.1 %	
AS % OF CAEP/4 LIMIT (NOx)			88.2 %	
AS % OF CAEP/6 LIMIT (NOx)			97.0 %	
AS % OF CAEP/8 LIMIT (NOx)			109.1 %	

DATA STATUS

PRE-REGULATION

CERTIFICATION

REVISED (SEE REMARKS)

EMISSIONS STATUS

DATA CORRECTED TO REFERENCE

(ANNEX 16 VOLUME II)

TEST ENGINE STATUS

NEWLY MANUFACTURED ENGINES

DEDICATED ENGINES TO PRODUCTION STANDARD

OTHER (SEE REMARKS)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

OUT OF PRODUCTION (DATE: -)

OUT OF SERVICE

MEASURED DATA

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F ₀₀)						
TAKE-OFF	100	0.7	3.523	0.09	0.08	59.56	0
CLIMB OUT	85	2.2	2.830	0.07	0.1	45.41	0
APPROACH	30	4.0	0.902	1.17	21.87	10.89	0
IDLE	7	26.0	0.316	2.64	34.7	6.17	9.3
LTO TOTAL FUEL (kg) or EMISSIONS (g) 1231			1594	21891	31175	_	
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS			3	3	3	3	
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)			3.74	51.31	73.05	9.5	
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			_	1	-	_	
RANGE $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			3.58-3.94	48.4-53.3	71.7-75.7	8.9-9.5	

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.38-98.59
TEMPERATURE (K)	274-299
ABS HUMIDITY (kg/kg)	.0010073

FUEL

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

MANUFACTURER:

GE GE90 Eval Engineering TEST ORGANIZATION:

TEST LOCATION: Site 1...
FROM 24 Feb 95 Site IVD & 6, PTO, Peebles, Ohio, USA TO 28 Jul 95

REMARKS

1. GE Report TM95-17.

2. Engine S/N 704/223 & 704/234

3. DAC I combustor

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

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