ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-90B   BYPASS RATIO: 8.4
UNIQUE ID NUMBER: 3GE060   PRESSURE RATIO (π_{oo}):   39.7
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN): 418.13

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (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 (NOx)			78.1 %	
AS % OF CAEP/4 LIMIT (NOx)			86.3 %	
AS % OF CAEP/6 LIMIT (NOx)			95.2 %	
AS % OF CAEP/8 LIMIT (NOx)			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

MEASURED DATA

MODE	POWER SETTING ($\%F_{oo}$)	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	3.419	0.08	0.08	57.34	0
CLIMB OUT	85	2.2	2.756	0.07	0.11	43.92	0
APPROACH	30	4.0	0.884	1.34	23.48	10.62	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_{oo} (g/kN) or AVERAGE SN (MAX)				4.01	53.84	70.42	9.5
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				3.82-4.22	51.0-55.7	69.1-73.0	9.0-9.5

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-.0073

FUEL

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

MANUFACTURER: GE
TEST ORGANIZATION: GE90 Eval Engineering
TEST LOCATION: Site IVD & 6, PTO, Peebles, Ohio, USA
TEST DATES: FROM 24 Feb 95   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: 0   ('x' if complies, PR if pre-regulation)