



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:GENx-1B64/P2

UNIQUE ID NUMBER:17GE172

ENGINE TYPE:TF

BYPASS RATIO:9.0

PRESSURE RATIO ( $\pi_{oo}$ ):40.9

RATED OUTPUT ( $F_{oo}$ ) (kN):298.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN	1.0	22.9	37.9	0.8
AS % OF ORIGINAL LIMIT	5.1 %	19.4 %	31.1 %	4.3 %
AS % OF CAEP/2 LIMIT (NOx)			38.9 %	
AS % OF CAEP/4 LIMIT (NOx)			42.7 %	
AS % OF CAEP/6 LIMIT (NOx)			46.9 %	
AS % OF CAEP/8 LIMIT (NOx)			52.7 %	

DATA STATUS

-PRE-REGULATION

x-CERTIFICATION

-REVISED (SEE REMARKS)

TEST ENGINE STATUS

x-NEWLY MANUFACTURED ENGINES

x-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)

-OUT OF PRODUCTION

-OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (%F <sub>oo</sub> )	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.273	0.02	0.09	27.12	0.16
CLIMB OUT	85	2.2	1.863	0.02	0.34	16.85	0.13
APPROACH	30	4.0	0.609	0.05	2.11	10.39	0.14
IDLE	7	26.0	0.204	0.56	16.13	4.69	0.06
LTO TOTAL FUEL (kg) or EMISSIONS (g)			806	191	5544	9747	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				0.64	18.61	32.71	0.58
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				0.05	0.029	0.201	0.34
RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				0.58-0.69	18.58-18.64	32.50-32.90	0.35-0.97

ACCESSORY LOADS

POWER EXTRACTION0(kW)ATALLPOWER SETTINGS

STAGE BLEED0% CORE FLOWATALLPOWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.1 to 98.5
TEMPERATURE (K)	295.1 to 298.8
ABS HUMIDITY (kg/kg)	.01189 to .01439

FUEL

SPEC	JET A
H/C	1.89
AROM (%)	15.4

MANUFACTURER:GE Aviation

TEST ORGANIZATION:GE Aviation

TEST LOCATION:PTO, Ohio, USA

TEST DATES:FROM19 Jun 12TO21 Jun 12

REMARKS

1. Ref. GE REPORT R2010AE907
2. Engine S/N 956-101/4
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

If REVISED, this data supersedes databank UID

Compliance with fuel venting requirements:x('x' if complies, PR if pre-regulation)