



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B58
UNIQUE ID NUMBER: 11GE135
ENGINE TYPE: TF

BYPASS RATIO: 9.2
PRESSURE RATIO (π_{00}): 37.2
RATED OUTPUT (F_{00}) (kN): 271.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	1.9	35.7	26.8	2.9
AS % OF ORIGINAL LIMIT	9.9 %	30.3 %	23.4 %	16.1 %
AS % OF CAEP/2 LIMIT (NOx)			29.3 %	
AS % OF CAEP/4 LIMIT (NOx)			32.9 %	
AS % OF CAEP/6 LIMIT (NOx)			36.5 %	
AS % OF CAEP/8 LIMIT (NOx)			41.5 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.019	0.02	0.25	18.04	0
CLIMB OUT	85	2.2	1.667	0.02	0.87	11.02	0
APPROACH	30	4.0	0.554	0.07	3.69	8.41	5.54
IDLE	7	26.0	0.190	1.11	24.31	4.08	0.05
LTO TOTAL FUEL (kg) or EMISSIONS (g)			734	342	7897	6279	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				1.26	29.1	23.14	2.3
SIGMA (D_p/F_{00} in g/kN, or SN)				0.08	0.7	0.02	1.1
RANGE (D_p/F_{00} in g/kN, or SN)				1.18 to 1.3	28.50 to 29.8	23.13 to 23.17	1.1 to 3.3

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4 to 98.6
TEMPERATURE (K)	280.5 to 299.0
AHS HUMIDITY (kg/kg)	0.00345 to 0.00716

FUEL

SPEC	JET A
H/C	1.89
AROM (%)	15.3

MANUFACTURER: GE Aviation
TEST ORGANIZATION: GE Aviation
TEST LOCATION: PTO, Ohio, USA
TEST DATES: FROM 29 Sep 09 TO 03 Oct 09

REMARKS

1. Ref. GE REPORT R2008AE357
2. Engine S/N 956-108/2
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)