



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-2B67B
UNIQUE ID NUMBER: 13GE157
ENGINE TYPE: TF

BYPASS RATIO: 8.0
PRESSURE RATIO (π_{00}): 42.4
RATED OUTPUT (F_{00}) (kN): 299.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	1.1	28.2	42.4	7.1
AS % OF ORIGINAL LIMIT	5.5 %	23.9 %	34.0 %	40.8 %
AS % OF CAEP/2 LIMIT (NOx)			42.5 %	
AS % OF CAEP/4 LIMIT (NOx)			48.9 %	
AS % OF CAEP/6 LIMIT (NOx)			50.7 %	
AS % OF CAEP/8 LIMIT (NOx)			56.7 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.451	0.02	0.17	31.2	0
CLIMB OUT	85	2.2	2.012	0.02	0.28	17.94	0
APPROACH	30	4.0	0.701	0.06	2.53	9.58	5.54
IDLE	7	26.0	0.216	0.57	18.95	4.43	0.05
LTO TOTAL FUEL (kg) or EMISSIONS (g)			874	208	6890	10978	-
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)				0.7	22.98	36.62	5.54
SIGMA (D_p/F_{00} in g/kN, or SN)				0.04	5.381844533	0.231342784	1.17
RANGE (D_p/F_{00} in g/kN, or SN)				0.67 - 0.74	22.57 - 23.44	36.35 - 36.79	4.61 - 6.86

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 - 98.6
TEMPERATURE (K)	280.5 - 299.0
ABS HUMIDITY (kg/kg)	0.00345 - 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 R2010AE644 + CID 573052Engine S/N 956-108/2
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)