



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B75/P2 BYPASS RATIO: 8.62
 UNIQUE ID NUMBER: 13GE159 PRESSURE RATIO (π_{00}): 47
 ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 345.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.6	17.8	55.2	0.8
AS % OF ORIGINAL LIMIT	3.3 %	15.1 %	41.2 %	4.5 %
AS % OF CAEP/2 LIMIT (NOx)			51.5 %	
AS % OF CAEP/4 LIMIT (NOx)			54.7 %	
AS % OF CAEP/6 LIMIT (NOx)			59.4 %	
AS % OF CAEP/8 LIMIT (NOx)			65.6 %	

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
TAKE-OFF	100	0.7	2.746	0.03	0.05	44.61	0
CLIMB OUT	85	2.2	2.229	0.02	0.1	25.83	0
APPROACH	30	4.0	0.701	0.04	1.57	11.67	0.76
IDLE	7	26.0	0.222	0.37	13.62	5.01	0.12
LTO TOTAL FUEL (kg) or EMISSIONS (g)			924	143	5014	16439	-
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)				0.41	14.53	47.62	0.58
SIGMA (D_p/F_{00} in g/kN, or SN)				0.02	0.021	0.313	0.34
RANGE (D_p/F_{00} in g/kN, or SN)				0.39-0.44	14.50-14.54	47.31-47.94	0.35-0.97

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT ALL POWER SETTINGS
 STAGE BLEED 0 % CORE FLOW AT ALL POWER 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: FROM 19 Jun 12 TO 21 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)