



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B74/75/P1 BYPASS RATIO: 8.8
UNIQUE ID NUMBER: 12GE155 PRESSURE RATIO (π_{00}): 46
ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 341.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.8	22.9	51.9	9.8
AS % OF ORIGINAL LIMIT	4.0 %	19.4 %	39.3 %	58.0 %
AS % OF CAEP/2 LIMIT (NOx)			49.1 %	
AS % OF CAEP/4 LIMIT (NOx)			52.4 %	
AS % OF CAEP/6 LIMIT (NOx)			57.0 %	
AS % OF CAEP/8 LIMIT (NOx)			63.2 %	

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	2.709	0.03	0.17	44.96	0
CLIMB OUT	85	2.2	2.202	0.02	0.19	23.36	0
APPROACH	30	4.0	0.703	0.05	2.09	10.3	6.7
IDLE	7	26.0	0.226	0.44	16.86	4.61	0.08
LTO TOTAL FUEL (kg) or EMISSIONS (g)			926	173	6367	15268	-
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)				0.51	18.66	44.75	7.6
SIGMA (D_p/F_{00} in g/kN, or SN)				0.03	0.35	0.44	2.05
RANGE (D_p/F_{00} in g/kN, or SN)				0.49-0.54	18.33-19.02	44.26-45.11	5.26-8.96

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
ABS 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

Ref. GE REPORT R2010AE595Engine S/N 956-108/2

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

x ('x' if complies, PR if pre-regulation)