



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B64/P2
UNIQUE ID NUMBER: 13GE165
COMBUSTOR: TAPS
ENGINE TYPE: TF

BYPASS RATIO: 9.0
PRESSURE RATIO (π_{00}): 40.9
RATED THRUST (F_{00}) (kN): 298.0

REGULATORY DATA

** DATA SUPERSEDED **

SEE FOLLOWING UID FOR REVISED DATA:

17GE172

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|---|-----|------|-----------------|--------------|
| D_p/F_{00} (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 (NO _x) | | | 38.9 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 42.7 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 46.9 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 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 (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

| MODE | POWER SETTING (% F_{00}) | TIME (minutes) | FUEL FLOW (kg/s) | HC | CO | NO _x | SMOKE NUMBER |
|---|-----------------------------|----------------|------------------|-----------|-------------|-----------------|--------------|
| TAKE-OFF | 100 | 0.7 | 2.273 | 0.02 | 0.09 | 27.12 | 0.0 |
| CLIMB OUT | 85 | 2.2 | 1.863 | 0.02 | 0.34 | 16.85 | 0.0 |
| APPROACH | 30 | 4.0 | 0.609 | 0.05 | 2.11 | 10.39 | 0.3 |
| IDLE | 7 | 26.0 | 0.204 | 0.56 | 16.13 | 4.69 | 0.1 |
| 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_p/F_{00} (g/kN) or AVERAGE SN (MAX) | | | | 0.6 | 18.6 | 32.7 | 0.6 |
| SIGMA (D_p/F_{00} in g/kN, or SN) | | | | 0.1 | 0.0 | 0.2 | 0.3 |
| RANGE (D_p/F_{00} in g/kN, or SN) | | | | 0.58-0.69 | 18.58-18.64 | 32.5-32.9 | 0.35-0.97 |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT All POWER SETTINGS
AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|-----------------|
| BAROMETER (kPa) | 98.1-98.5 |
| TEMPERATURE (K) | 295.1-298.8 |
| ABS HUMIDITY (kg/kg) | 0.01189-0.01439 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.89 |
| AROM (%) | 15.4 |

MANUFACTURER: General Electric Company
TEST ORGANIZATION: General Electric Company
TEST LOCATION: PTO, Ohio
TEST DATES: 19/06/2012-21/06/2012

NO_x REGULATION PARAGRAPH

| | |
|---|-------------------|
| | 2.3.2 c) (CAEP/4) |
| | 2.3.2 d) (CAEP/6) |
| x | 2.3.2 e) (CAEP/8) |

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. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation,
- if information is not available)