



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B67/P2  
UNIQUE ID NUMBER: 17GE173  
COMBUSTOR: TAPS  
ENGINE TYPE: TF

BYPASS RATIO: 8.9  
PRESSURE RATIO ( $\pi_{00}$ ): 42.2  
RATED THRUST ( $F_{00}$ ) (kN): 308.7

## REGULATORY DATA

\*\* DATA SUPERSEDED \*\*

SEE FOLLOWING UID FOR REVISED DATA:

01P17GE207

| CHARACTERISTIC VALUE:                        | HC  | CO   | NO <sub>x</sub> | SMOKE NUMBER |
|--|-----|------|-----------------|--------------|
| D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN | 0.9 | 21.5 | 41.1            | 0.8          |
| AS % OF ORIGINAL LIMIT                       | 4.5 | 18.2 | 33.1            | 4.3          |
| AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )      |     |      | 41.3            |              |
| AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )      |     |      | 45.0            |              |
| AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )      |     |      | 49.3            |              |
| AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )      |     |      | 55.2            |              |

## 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 (DATE: - )  
- OUT OF SERVICE (DATE: - )

## MEASURED DATA

| MODE   | POWER SETTING (%F <sub>00</sub> ) | TIME (minutes) | FUEL FLOW (kg/s) | HC        | CO          | NO <sub>x</sub> | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|-----------|-------------|-----------------|--------------|
| TAKE-OFF   | 100                               | 0.7            | 2.376            | 0.02      | 0.08        | 30.32           | 0.2          |
| CLIMB OUT  | 85                                | 2.2            | 1.943            | 0.02      | 0.24        | 18.57           | 0.1          |
| APPROACH   | 30                                | 4.0            | 0.629            | 0.05      | 1.97        | 10.67           | 0.2          |
| IDLE   | 7                                 | 26.0           | 0.209            | 0.50      | 15.49       | 4.76            | 0.1          |
| LTO TOTAL FUEL (kg) or EMISSIONS (g)                               |                                   |                | 833              | 176       | 5409        | 10951           | -            |
| NUMBER OF ENGINES  |                                   |                |                  | 1         | 1           | 1               | 1            |
| NUMBER OF TESTS  |                                   |                |                  | 3         | 3           | 3               | 3            |
| AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX) |                                   |                |                  | 0.6       | 17.5        | 35.5            | 0.6          |
| SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)             |                                   |                |                  | 0.0       | 0.0         | 0.2             | 0.3          |
| RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)             |                                   |                |                  | 0.52-0.61 | 17.49-17.54 | 35.24-3568      | 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<sub>x</sub> 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<sub>x</sub> 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)