



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B6
UNIQUE ID NUMBER: 2GE044
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 31.66
RATED OUTPUT (F_{00}) (kN): 267.2

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NOx | SMOKE NUMBER |
|----------------------------|--------|--------|--------|--------------|
| D_p/F_{00} (g/kN) or SN | 2.5 | 27.1 | 52.0 | 8.1 |
| AS % OF ORIGINAL LIMIT | 12.6 % | 23.0 % | 50.3 % | 44.8 % |
| AS % OF CAEP/2 LIMIT (NOx) | | | 62.9 % | |
| AS % OF CAEP/4 LIMIT (NOx) | | | 74.0 % | |
| AS % OF CAEP/6 LIMIT (NOx) | | | 83.5 % | |
| AS % OF CAEP/8 LIMIT (NOx) | | | 97.3 % | |

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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 | 2.580 | 0.04 | 0.06 | 28.57 | 6.9 |
| CLIMB OUT | 85 | 2.2 | 2.096 | 0.05 | 0.04 | 21.69 | 5.4 |
| APPROACH | 30 | 4.0 | 0.672 | 0.11 | 1.91 | 12.53 | 0 |
| IDLE | 7 | 26.0 | 0.205 | 1.48 | 18.89 | 4.76 | 0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 866 | 509 | 6367 | 12640 | - |
| NUMBER OF ENGINES | | | | 2 | 2 | 2 | 2 |
| NUMBER OF TESTS | | | | 4 | 4 | 4 | 4 |
| AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX) | | | | 1.9 | 23.8 | 47.3 | 6.9 |
| SIGMA (D_p/F_{00} in g/kN, or SN) | | | | 0.209 | 1.196 | 0.5 | 0.914 |
| RANGE (D_p/F_{00} in g/kN, or SN) | | | | 1.76-2.24 | 22.6-25.5 | 46.7-47.9 | 5.9-8.2 |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|---------------|
| BAROMETER (kPa) | 97.61-98.15 |
| TEMPERATURE (K) | 279-293 |
| ABS HUMIDITY (kg/kg) | .00457-.00743 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.94 |
| AROM (%) | 15.3 |

MANUFACTURER: GE
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: Site IIIB, PTO Peebles
TEST DATES: FROM 13 Jan 95 TO 17 Jan 95

REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor
4. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
5. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e)

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

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