



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-6D
UNIQUE ID NUMBER: 1GE001
COMBUSTOR:
ENGINE TYPE: TF
BYPASS RATIO: 5.9
PRESSURE RATIO (π_{00}): 24.7
RATED THRUST (F_{00}) (kN): 174.8

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|--|-------|------|-----------------|--------------|
| D _p /F ₀₀ (g/kN) or SN | 36.7 | 93.3 | 68.9 | 4.3 |
| AS % OF ORIGINAL LIMIT | 187.4 | 79.1 | 77.1 | 20.9 |
| AS % OF CAEP/2 LIMIT (NO _x) | | | 96.4 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 117.8 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 133.8 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 161.5 | |

DATA STATUS

x PRE-REGULATION
- CERTIFICATION
x 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)
x 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 | 1.736 | 0.30 | 0.50 | 40.00 | 4.0 |
| CLIMB OUT | 85 | 2.2 | 1.431 | 0.30 | 0.50 | 32.60 | 3.0 |
| APPROACH | 30 | 4.0 | 0.484 | 0.70 | 6.50 | 11.40 | 3.0 |
| IDLE | 7 | 26.0 | 0.173 | 21.00 | 54.20 | 4.50 | 4.0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 648 | 5821 | 15496 | 11611 | - |
| NUMBER OF ENGINES | | | | 7 | 7 | 7 | 7 |
| NUMBER OF TESTS | | | | 7 | 7 | 7 | 7 |
| AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX) | | | | 33.3 | 88.7 | 66.4 | 4.0 |
| SIGMA (D _p /F ₀₀ in g/kN, or SN) | | | | 3.5 | 6.9 | 2.3 | 2.2 |
| RANGE (D _p /F ₀₀ in g/kN, or SN) | | | | | | | |

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|-------------|
| BAROMETER (kPa) | 99.2-100.5 |
| TEMPERATURE (K) | 280-301 |
| ABS HUMIDITY (kg/kg) | 0.003-0.015 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.93 |
| AROM (%) | 18.7 |

MANUFACTURER: General Electric Company
TEST ORGANIZATION: Production Engine Test
TEST LOCATION: Production Test Cells M34 & M35
TEST DATES: 16/08/1979-19/11/1979

REMARKS

1. Ref Report no FAA-EE-80-27 (GE Report R80AEG420)

Compliance with Fuel Venting requirements:

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