



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-10A18
UNIQUE ID NUMBER: 11GE141
ENGINE TYPE: TF

BYPASS RATIO: 5.4
PRESSURE RATIO (π_{00}): 26.5
RATED OUTPUT (F_{00}) (kN): 82.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	14.6	98.5	43.3	19.0
AS % OF ORIGINAL LIMIT	74.5 %	83.5 %	46.6 %	76.1 %
AS % OF CAEP/2 LIMIT (NOx)			58.2 %	
AS % OF CAEP/4 LIMIT (NOx)			68.9 %	
AS % OF CAEP/6 LIMIT (NOx)			78.0 %	
AS % OF CAEP/8 LIMIT (NOx)			90.2 %	

DATA STATUS

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

TEST ENGINE STATUS

- 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
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.826	0.05	0.66	19.47	14.73
CLIMB OUT	85	2.2	0.684	0.08	0.36	16.72	7.01
APPROACH	30	4.0	0.232	0.13	3.43	8.26	0.12
IDLE	7	26.0	0.086	5.67	47.29	3.58	0.35
LTO TOTAL FUEL (kg) or EMISSIONS (g)			315	776	6589	3070	-
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)				9.5	80.2	37.4	14.7
SIGMA (D_p/F_{00} in g/kN, or SN)				0.55	1.8	0.43	0.29
RANGE (D_p/F_{00} in g/kN, or SN)				8.8-9.8	78.8-82.3	36.9-37.7	14.5-15.1

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.2-97.9
TEMPERATURE (K)	296-300
ABS HUMIDITY (kg/kg)	0.0099 - 0.0127

FUEL

SPEC	Jet A1
H/C	1.92
AROM (%)	16.3% - 17.4%

MANUFACTURER: GE Transportation
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Site 4D
TEST DATES: FROM 05 Sep 06 TO 10 Sep 06

REMARKS

1. GE Report R2007AE480Engine 994-251/1
2. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
3. 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:

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