



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C1
UNIQUE ID NUMBER: 5GE083
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{00}): 23.03
RATED OUTPUT (F_{00}) (kN): 56.36

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.3	63.0	43.1	6.9
AS % OF ORIGINAL LIMIT	1.5 %	53.4 %	50.1 %	24.9 %
AS % OF CAEP/2 LIMIT (NOx)			62.6 %	
AS % OF CAEP/4 LIMIT (NOx)			68.7 %	
AS % OF CAEP/6 LIMIT (NOx)			72.5 %	
AS % OF CAEP/8 LIMIT (NOx)			80.6 %	

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	0.604	0.02	0.41	14.67	5.33
CLIMB OUT	85	2.2	0.494	0.02	0.5	12.82	1.48
APPROACH	30	4.0	0.168	0.06	2.91	11.1	0
IDLE	7	26.0	0.069	0.08	24.92	4.31	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			239	13	2845	2120	-
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)				0.2	51.3	37.2	5.33
SIGMA (D_p/F_{00} in g/kN, or SN)				0	1.04	0.74	1
RANGE (D_p/F_{00} in g/kN, or SN)				0.2 - 0.2	50.1 - 52.0	36.6 - 38.0	4.6 - 6.5

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.87 - 97.62
TEMPERATURE (K)	287 - 296.4
ABS HUMIDITY (kg/kg)	.0056 - .00656

FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	16.87

MANUFACTURER: GE
TEST ORGANIZATION: Peebles Test Opeation
TEST LOCATION: Peebles, Ohio
TEST DATES: FROM 00 Jan 00 TO -

REMARKS

1. Ref. GE Report R99AEB031.
2. Engine S/S 965202.
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. 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)