



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-10A16
UNIQUE ID NUMBER: 11GE140
COMBUSTOR: 2253M21
ENGINE TYPE: TF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{00}): 25.1
RATED THRUST (F_{00}) (kN): 76.9

REGULATORY DATA

**** DATA SUPERSEDED ****

SEE FOLLOWING UID FOR REVISED DATA:

01P11GE202

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	18.4	111.9	40.6	14.2
AS % OF ORIGINAL LIMIT	93.9	94.8	45.0	55.8
AS % OF CAEP/2 LIMIT (NO _x)			56.3	
AS % OF CAEP/4 LIMIT (NO _x)			65.8	
AS % OF CAEP/6 LIMIT (NO _x)			73.0	
AS % OF CAEP/8 LIMIT (NO _x)			84.3	

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 (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	0.765	0.06	0.49	17.87	11.1
CLIMB OUT	85	2.2	0.632	0.08	0.34	15.04	5.1
APPROACH	30	4.0	0.219	0.14	3.98	7.97	0.1
IDLE	7	26.0	0.083	6.96	52.05	3.45	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			298	919	7014	2696	-
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)				11.9	91.2	35.0	11.1
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.6	1.9	0.4	0.6
RANGE (D _p /F ₀₀ in g/kN, or SN)				11.2-12.3	89.4-93.2	34.6-35.4	10.5-11.7

ACCESSORY LOADS

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

AT All POWER SETTINGS
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 A-1
H/C	1.92
AROM (%)	16.3-17.4

MANUFACTURER: General Electric Company
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Site 4D
TEST DATES: 05/09/2006-10/09/2006

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

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. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e)

Compliance with Fuel Venting requirements:

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