



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C1
UNIQUE ID NUMBER: 6AL004
COMBUSTOR:
ENGINE TYPE: MTF
BYPASS RATIO: 5.1
PRESSURE RATIO (π_{o0}): 16.6
RATED THRUST (F_{o0}) (kN): 31.5

REGULATORY DATA ** DATA SUPERSEDED ** SEE FOLLOWING UID FOR REVISED DATA: 6AL023

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{o0} (g/kN) or SN	14.3	66.8	41.1	1.2
AS % OF ORIGINAL LIMIT	55.9	56.6	56.1	3.6
AS % OF CAEP/2 LIMIT (NO _x)			70.2	
AS % OF CAEP/4 LIMIT (NO _x)			71.3	
AS % OF CAEP/6 LIMIT (NO _x)			71.9	
AS % OF CAEP/8 LIMIT (NO _x)			76.4	

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)
x OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{o0})	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.322	0.24	0.87	17.90	1.0
CLIMB OUT	85	2.2	0.269	0.28	1.07	15.35	0.0
APPROACH	30	4.0	0.099	0.66	3.96	7.05	0.0
IDLE	7	26.0	0.042	4.84	26.04	3.37	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			138	346	1850	1175	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F _{o0} (g/kN) or AVERAGE SN (MAX)				11.0	58.6	37.4	1.0
SIGMA (D _p /F _{o0} in g/kN, or SN)							
RANGE (D _p /F _{o0} 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)	101.3
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.0063

FUEL

SPEC	Jet A/JP-8
H/C	1.9
AROM (%)	16.5

MANUFACTURER: Rolls-Royce Corporation
TEST ORGANIZATION: Rolls-Royce Corporation
TEST LOCATION: Indianapolis, Indiana
TEST DATES: 03/03/1994-19/04/1995

REMARKS

1. Results based on Rolls Royce report EDR 15171B

Compliance with Fuel Venting requirements:

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