



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C
UNIQUE ID NUMBER: 3AL001
COMBUSTOR:
ENGINE TYPE: MTF

BYPASS RATIO: 5.3
PRESSURE RATIO (π_{o0}): 16.2
RATED THRUST (F_{o0}) (kN): 28.6

REGULATORY DATA ** DATA SUPERSEDED ** SEE FOLLOWING UID FOR REVISED DATA: 6AL021

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{o0} (g/kN) or SN	17.5	77.5	38.2	1.2
AS % OF ORIGINAL LIMIT	89.3	65.7	52.8	3.6
AS % OF CAEP/2 LIMIT (NO _x)			66.0	
AS % OF CAEP/4 LIMIT (NO _x)			66.4	
AS % OF CAEP/6 LIMIT (NO _x)			66.6	
AS % OF CAEP/8 LIMIT (NO _x)			70.4	

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	0.280	0.29	0.97	16.92	1.0
CLIMB OUT	85	2.2	0.234	0.33	1.19	14.56	0.0
APPROACH	30	4.0	0.091	0.83	4.50	6.63	0.0
IDLE	7	26.0	0.039	5.84	29.88	3.24	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			125	387	1964	991	-
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)				13.5	68.0	34.7	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: Allison Engine Company
TEST LOCATION: Indianapolis, Indiana
TEST DATES: 03/03/1994-19/04/1995

REMARKS

Compliance with Fuel Venting requirements:

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