



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2524-A5
UNIQUE ID NUMBER: 3IA007
COMBUSTOR:
ENGINE TYPE: MTF
BYPASS RATIO: 4.8
PRESSURE RATIO (π_{00}): 26.9
RATED THRUST (F_{00}) (kN): 109.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.4	30.4	56.1	11.6
AS % OF ORIGINAL LIMIT	2.2	25.8	59.8	50.2
AS % OF CAEP/2 LIMIT (NO _x)			74.8	
AS % OF CAEP/4 LIMIT (NO _x)			90.4	
AS % OF CAEP/6 LIMIT (NO _x)			102.8	
AS % OF CAEP/8 LIMIT (NO _x)			122.6	

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)
x 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	1.042	0.04	0.54	26.20	5.2
CLIMB OUT	85	2.2	0.868	0.04	0.63	22.00	7.2
APPROACH	30	4.0	0.328	0.06	2.37	9.00	4.2
IDLE	7	26.0	0.123	0.10	12.64	4.70	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			429	31	2708	5278	-
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)				0.3	24.8	48.4	9.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 6.2 / 5.5 (% CORE FLOW)

AT - POWER SETTINGS
AT 7% / 30% POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101-101.8
TEMPERATURE (K)	288-296
ABS HUMIDITY (kg/kg)	0.0086-0.0114

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	

MANUFACTURER: International Aero Engines
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: 12/08/1992-13/08/1992

REMARKS

1. Engine Type description originally wrongly given as TF; amended in Issue 15 to MTF

Compliance with Fuel Venting requirements:

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