



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7R4H1
UNIQUE ID NUMBER: 1PW030
ENGINE TYPE: TF

BYPASS RATIO: 4.8
PRESSURE RATIO (π_{oo}): 26.7
RATED OUTPUT (F_{oo}) (kN): 249.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	3.0	21.7	68.2	8.4
AS % OF ORIGINAL LIMIT	15.5 %	18.4 %	73.0 %	45.4 %
AS % OF CAEP/2 LIMIT (NOx)			91.2 %	
AS % OF CAEP/4 LIMIT (NOx)			110.4 %	
AS % OF CAEP/6 LIMIT (NOx)			125.5 %	
AS % OF CAEP/8 LIMIT (NOx)			150.0 %	

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

MEASURED DATA

MODE	POWER SETTING (% F_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.512	0.15	0.74	45.2	7.6
CLIMB OUT	85	2.2	1.999	0.14	0.63	30	-
APPROACH	30	4.0	0.723	0.18	1.39	8.9	-
IDLE	7	26.0	0.245	1.48	11.63	3.8	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			926	651	4938	15683	-
NUMBER OF ENGINES				5	5	5	3
NUMBER OF TESTS				6	6	6	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				2.7	20.4	65.2	7.6
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				-	-	-	-

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	-
TEMPERATURE (K)	271 - 299
ABS HUMIDITY (kg/kg)	-

FUEL

SPEC	Jet A
H/C	-
AROM (%)	-

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: P&WA
TEST LOCATION: E Hartford, CT, USA
TEST DATES: FROM 26 Oct 81 TO 10 Sep 83

REMARKS

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If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)