



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-20J
UNIQUE ID NUMBER: 1PW032
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 23.5
RATED OUTPUT (F_{00}) (kN): 222.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	64.7	145.9	79.6	20.8
AS % OF ORIGINAL LIMIT	330.1 %	123.6 %	91.5 %	109.4 %
AS % OF CAEP/2 LIMIT (NOx)			114.4 %	
AS % OF CAEP/4 LIMIT (NOx)			140.6 %	
AS % OF CAEP/6 LIMIT (NOx)			159.8 %	
AS % OF CAEP/8 LIMIT (NOx)			194.3 %	

DATA STATUS

x PRE-REGULATION
- 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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	2.315	0	0.9	44.9	-
CLIMB OUT	85	2.2	1.902	0	0.9	34.9	-
APPROACH	30	4.0	0.679	0.5	5.5	9.4	-
IDLE	7	26.0	0.238	24.5	66.7	3.3	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			883	9178	25974	15885	-
NUMBER OF ENGINES				1	1	1	-
NUMBER OF TESTS				1	1	1	-
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				42	118.9	68.7	16
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 0 % CORE FLOW

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	-
TEMPERATURE (K)	-
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 16 Sep 80 TO -

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)