

## ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## **SUBSONIC ENGINES**

ENGINE IDENTIFICATION: V2528-D5 BYPASS RATIO: 4.66 UNIQUE ID NUMBER: 11A004 PRESSURE RATIO  $(\pi_{oo})$ : 30 ENGINE TYPE: MTF RATED OUTPUT  $(F_{oo})$  (kN): 124.5

## REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	0.4	26.4	62.2	11.6
AS % OF ORIGINAL LIMIT	2.1 %	22.4 %	62.2 %	52.0 %
AS % OF CAEP/2 LIMIT (NOx)			77.8 %	
AS % OF CAEP/4 LIMIT (NOx)			92.9 %	
AS % OF CAEP/6 LIMIT (NOx)			105.6 %	
AS % OF CAEP/8 LIMIT (NOx)			124.1 %	

## DATA STATUS

- PRE-REGULATION

x CERTIFICATION

- REVISED (SEE REMARKS)

# EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE

(ANNEX 16 VOLUME II)

## TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES

- DEDICATED ENGINES TO PRODUCTION STANDARD

- OTHER (SEE REMARKS)

#### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

x OUT OF PRODUCTION (DATE: - )

- OUT OF SERVICE

FUEL

SPEC

H/C AROM (%)

## MEASURED DATA

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F <sub>00</sub> )						
TAKE-OFF	100	0.7	1.209	0.043	0.47	30.5	5
CLIMB OUT	85	2.2	0.996	0.041	0.56	25.1	6.6
APPROACH	30	4.0	0.353	0.058	2.03	9.6	4.5
IDLE	7	26.0	0.134	0.102	11.53	4.9	2.4
LTO TOTAL FUEL (kg) or EMISSIONS (g) 476			34	2680	6686	_	
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				0.27	21.5	53.7	9
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$				1	_	1	_
RANGE $(D_p/F_{oo} \text{ in g/kN, or SN})$				-	-	-	-

# ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS STAGE BLEED 4.5 % CORE FLOW AT 0.07 POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.0-101.8		
TEMPERATURE (K)	288 - 296		
ABS HUMIDITY (kg/kg)	.00860114		

MANUFACTURER: International Aero Engines
TEST ORGANIZATION: Pratt & Whitney

TEST LOCATION: East Hartford, CT, USA

TEST DATES: FROM 12 Aug 92 TO 13 Aug 92

## REMARKS

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

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

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

Jet