



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:HTF7700L (AS907-2-1S)

UNIQUE ID NUMBER:18HN010

ENGINE TYPE:MTF

BYPASS RATIO:4.2

PRESSURE RATIO ( $\pi_{oo}$ ):23.3

RATED OUTPUT ( $F_{oo}$ ) (kN):34.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN	2.7	76.5	48.9	15.0
AS % OF ORIGINAL LIMIT	13.6 %	64.8 %	56.4 %	53.0 %
AS % OF CAEP/2 LIMIT (NOx)			70.5 %	
AS % OF CAEP/4 LIMIT (NOx)			72.1 %	
AS % OF CAEP/6 LIMIT (NOx)			73.0 %	
AS % OF CAEP/8 LIMIT (NOx)			77.7 %	

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

xDATA CORRECTED TO REFERENCE  
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

-OUT OF PRODUCTION

-OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (%F <sub>oo</sub> )	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.386	0.05	0.6	19.4	13.6
CLIMB OUT	85	2.2	0.319	0.06	0.58	16.96	11.2
APPROACH	30	4.0	0.109	0.11	5.72	9.21	0.98
IDLE	7	26.0	0.048	0.95	29.62	4.01	1.77
LTO TOTAL FUEL (kg) or EMISSIONS (g)			159	77	2402	1570	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				10	10	10	10
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				2.28	70.71	46.12	13.6
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				0.44	4.03	2.32	1.57
RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				1.64-2.93	64.68-75.93	40.12-47.91	9.0-13.6

ACCESSORY LOADS

POWER EXTRACTION0(kW)AT-POWER SETTINGS

STAGE BLEED0% CORE FLOWAT-POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.44-97.59
TEMPERATURE (K)	296-313
ABS HUMIDITY (kg/kg)	0.0013-0.0125

FUEL

SPEC	Jet-A
H/C	13.5-13.7
AROM (%)	16.9-20.5

MANUFACTURER:Honeywell

TEST ORGANIZATION:Honeywell

TEST LOCATION:Phoenix, AZ

TEST DATES:FROM 07 Apr 10TO 29 Jul 10

REMARKS

1. Reference: Honeywell Report 21-15565(29)-1 Exhaust Smoke and Gaseous Emissions Similarity Analysis for tl
2. Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
3. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

If REVISED, this data supersedes databank UID

Compliance with fuel venting requirements:x('x' if complies, PR if pre-regulation)