



# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: HTF7250G (AS907-2-1G) BYPASS RATIO: 4.2  
UNIQUE ID NUMBER: 11HN004 PRESSURE RATIO ( $\pi_{00}$ ): 22.58  
ENGINE TYPE: MTF RATED OUTPUT ( $F_{00}$ ) (kN): 32.86

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
$D_p/F_{00}$ (g/kN) or SN	3.1	84.9	49.5	16.0
AS % OF ORIGINAL LIMIT	15.9 %	72.0 %	58.1 %	49.7 %
AS % OF CAEP/2 LIMIT (NOx)			72.6 %	
AS % OF CAEP/4 LIMIT (NOx)			74.0 %	
AS % OF CAEP/6 LIMIT (NOx)			74.7 %	
AS % OF CAEP/8 LIMIT (NOx)			79.5 %	

### 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)  
- OUT OF PRODUCTION  
- 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	0.372	0.06	0.54	18.29	13.6
CLIMB OUT	85	2.2	0.308	0.06	0.61	16.39	10.6
APPROACH	30	4.0	0.107	0.11	6.29	8.735	0.7
IDLE	7	26.0	0.049	0.94	29.28	3.905	1.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			158	-	-	-	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				6	6	6	6
AVERAGE $D_p/F_{00}$ (g/kN) or AVERAGE SN (MAX)				2.38	74.04	44.89	13.6
SIGMA ( $D_p/F_{00}$ in g/kN, or SN)				0.62	3.5	2.89	0.88
RANGE ( $D_p/F_{00}$ in g/kN, or SN)				1.82-3.24	70.64-79.66	39.63-47.31	11.4-13.6

### ACCESSORY LOADS

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

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.44-97.35
TEMPERATURE (K)	304-313
ABS HUMIDITY (kg/kg)	0.0035-0.0125

### FUEL

SPEC	Jet-A
H/C	13.6-13.7
AROM (%)	18.2-19.1

MANUFACTURER: Honeywell  
TEST ORGANIZATION: Honeywell  
TEST LOCATION: Phoenix, AZ  
TEST DATES: FROM 16 Jun 10 TO 29 Jul 10

### REMARKS

- Reference: Honeywell Report 21-13729(29)-1
- Exhaust Smoke and Gaseous Emissions test of the AS907-2-1G Turbofan Engine
- Reported using humidity  $h=0.00629$  in accordance with 14 CFR 34
- Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
- NOx levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

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

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