

ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: HTF7250G (AS907-2-1G) BYPASS RATIO: 4.2 UNIQUE ID NUMBER: 11HN005 PRESSURE RATIO (π_{oo}) : 22.58 ENGINE TYPE: MTF RATED OUTPUT (F_{oo}) (kN): 32.86

REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	2.9	83.5	48.1	15.0
AS % OF ORIGINAL LIMIT	15.0 %	70.7 %	63.2 %	46.6 %
AS % OF CAEP/2 LIMIT (NOx)			70.6 %	
AS % OF CAEP/4 LIMIT (NOx)			72.0 %	
AS % OF CAEP/6 LIMIT (NOx)			72.7 %	
AS % OF CAEP/8 LIMIT (NOx)			77.3 %	

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

	POWER	TIME	FUEL FLOW	EMISSIONS INDICES (g/kg)			
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F ₀₀)						
TAKE-OFF	100	0.7	0.372	0.05	0.57	18.43	13.6
CLIMB OUT	85	2.2	0.308	0.06	0.6	16.44	10.6
APPROACH	30	4.0	0.107	0.12	6.07	8.96	0.8
IDLE	7	26.0	0.049	0.99	30.48	3.965	1.8
LTO TOTAL FUEL (kg) or EMISSIONS (g) 158				-	-	-	_
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS			10	10	10	10	
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)			2.49	76.66	45.33	13.6	
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			0.48	4.3	2.29	1.5	
RANGE $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			1.82-3.24	70.64-82.76	39.59-47.27	9.2-13.6	

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.44-97.59		
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 10 TO 29 Jul 10

REMARKS

1. Reference: Honeywell Report 21-14477A

- 2. Exhaust Smoke and Gaseous Emissions tests of the AS907-1-1A and AS907-2-1G Turbofan Engines
- 3. Reported using humidity h=0.00634 in accordance with ICAO Annex 16, Vol. II, 3rd Ed., section 7.1.3.
- 4. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
- 5. 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)