



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: HTF7250G (AS907-2-1G) BYPASS RATIO: 4.2  
UNIQUE ID NUMBER: 11HN004 PRESSURE RATIO ( $\pi_{co}$ ): 22.6  
COMBUSTOR: SABER-1  
ENGINE TYPE: MTF RATED THRUST ( $F_{eo}$ ) (kN): 32.9

## REGULATORY DATA

\*\* DATA SUPERSEDED \*\*

SEE FOLLOWING UID FOR REVISED DATA:

11HN005

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>eo</sub> (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 (NO <sub>x</sub> )			72.6	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			74.0	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			74.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			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)

x OUT OF PRODUCTION (DATE: - )  
- OUT OF SERVICE (DATE: - )

## MEASURED DATA

MODE	POWER	TIME	FUEL FLOW	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
	SETTING (%F <sub>oo</sub> )	(minutes)	(kg/s)	HC	CO	NO <sub>x</sub>	
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	8.74	0.7
IDLE	7	26.0	0.049	0.94	29.28	3.91	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 <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				2.4	74.0	44.9	13.6
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				0.6	3.5	2.9	0.9
RANGE (D <sub>p</sub> /F <sub>oo</sub> 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)	96.4-97.4
TEMPERATURE (K)	304-313
ABS HUMIDITY (kg/kg)	0.0035-0.0125

## FUEL

SPEC	Jet A
H/C	1.87-1.89
AROM (%)	18.2-19.1

MANUFACTURER: Honeywell  
TEST ORGANIZATION: Honeywell  
TEST LOCATION: Phoenix, AZ  
TEST DATES: 16/06/2010-29/07/2010

NO<sub>x</sub> REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

## 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.
- NO<sub>x</sub> levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation,  
'- ' if information is not available)