



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: HTF 7000 (AS907-1-1A) BYPASS RATIO: 4.2
 UNIQUE ID NUMBER: 11HN002 PRESSURE RATIO (π_{oo}): 21.95
 ENGINE TYPE: MTF RATED OUTPUT (F_{oo}) (kN): 30.62

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	5.4	110.9	53.4	12.8
AS % OF ORIGINAL LIMIT	27.5 %	93.9 %	63.7 %	39.0 %
AS % OF CAEP/2 LIMIT (NOx)			79.6 %	
AS % OF CAEP/4 LIMIT (NOx)			80.6 %	
AS % OF CAEP/6 LIMIT (NOx)			81.1 %	
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

MODE	POWER SETTING	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
	(%F _{oo})			HC	CO	NOx	
TAKE-OFF	100	0.7	0.347	0.04	0.6	18.095	9.9
CLIMB OUT	85	2.2	0.288	0.06	0.6	16.28	9
APPROACH	30	4.0	0.104	0.12	5.97	9.17	0.7
IDLE	7	26.0	0.048	1.35	34.5	3.98	1.7
LTO TOTAL FUEL (kg) or EMISSIONS (g)			152	-	-	-	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				4	4	4	4
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				3.5	90.31	46.09	9.92
SIGMA (D _p /F _{oo} in g/kN, or SN)				0.11	1.6	0.79	0.42
RANGE (D _p /F _{oo} in g/kN, or SN)				3.40-3.62	88.87-92.46	45.45-47.11	9.2-10.0

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.75-97.59
TEMPERATURE (K)	296-303
ABS HUMIDITY (kg/kg)	0.0013-0.0040

FUEL

SPEC	Jet-A
H/C	13.6-13.7
AROM (%)	19.6-20.5

MANUFACTURER: Honeywell
 TEST ORGANIZATION: Honeywell
 TEST LOCATION: Phoenix, AZ
 TEST DATES: FROM 07 Apr 10 TO 14 Apr 10

REMARKS

- Reference: Original FAA Certification Report; Honeywell Report 21-14240-6A
- Exhaust Smoke and Gaseous Emissions Test of the AS907-1-1A Turbofan Engine, dated August 31, 2010.
- 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)