



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AS907-1-1A
UNIQUE ID NUMBER: 8HN001
ENGINE TYPE: TF

BYPASS RATIO: 4.2
PRESSURE RATIO (π_{oo}): 21.95
RATED OUTPUT (F_{oo}) (kN): 30.62

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	16.3	94.9	66.3	24.1
AS % OF ORIGINAL LIMIT	83.3 %	80.4 %	79.0 %	73.5 %
AS % OF CAEP/2 LIMIT (NOx)			98.7 %	
AS % OF CAEP/4 LIMIT (NOx)			99.9 %	
AS % OF CAEP/6 LIMIT (NOx)			100.6 %	
AS % OF CAEP/8 LIMIT (NOx)			106.5 %	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.347	0.01	0.69	26.29	18.3
CLIMB OUT	85	2.2	0.288	0.01	0.56	21.51	18.4
APPROACH	30	4.0	0.104	0.08	2.98	9.39	8.7
IDLE	7	26.0	0.048	4.3	30.21	4.2	3.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			152	325	2368	1751	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				10.6	77.28	57.16	18.7
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.8	1.9	0.08	-
RANGE (D_p/F_{oo} in g/kN, or SN)				9.8-11.5	75.1-78.8	57.1-57.2	-

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.48-97.46
TEMPERATURE (K)	292-296
AHS HUMIDITY (kg/kg)	0.0037-0.0057

FUEL

SPEC	Jet A
H/C	1.866
AROM (%)	16.5

MANUFACTURER: Honeywell
TEST ORGANIZATION: Honeywell
TEST LOCATION: Phoenix, AZ
TEST DATES: FROM 10 Jan 02 TO 11 Jan 02

REMARKS

-

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

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