



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2530-A5 SelectOne™ Upgrade BYPASS RATIO: 4.6
UNIQUE ID NUMBER: 10IA016 PRESSURE RATIO (π_{00}): 32
ENGINE TYPE: MTF RATED OUTPUT (F_{00}) (kN): 133

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.4	22.2	61.3	11.1
AS % OF ORIGINAL LIMIT	1.9 %	18.8 %	59.0 %	50.5 %
AS % OF CAEP/2 LIMIT (NOx)			73.7 %	
AS % OF CAEP/4 LIMIT (NOx)			86.4 %	
AS % OF CAEP/6 LIMIT (NOx)			97.4 %	
AS % OF CAEP/8 LIMIT (NOx)			113.3 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.325	0.02	0.39	31.43	3.7
CLIMB OUT	85	2.2	1.078	0.03	0.41	23.92	6.6
APPROACH	30	4.0	0.387	0.06	1.65	10.92	5.7
IDLE	7	26.0	0.145	0.12	10.45	5.52	1.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			517	38	2594	7414	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				0.3	19.5	55.7	9.4
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				-	-	-	-

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.35-102.88
TEMPERATURE (K)	268.2-277.7
ABS HUMIDITY (kg/kg)	0.00140-0.00359

FUEL

SPEC	JET A
H/C	1.91
AROM (%)	17

MANUFACTURER: IAE International Aero Engines
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: FROM 11 Dec 08 TO 19 Jan 09

REMARKS

- Engine performance reflects new SelectOne™ package upgrades.
- Certification in accordance with Part III, Chapter 2, of Amendment 6 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)