CI. Mr. go

ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: LEAP-1A26/26E1 BYPASS RATIO: 11.1 UNIQUE ID NUMBER: 17CM082 PRESSURE RATIO (π_{oo}) : 33.4 ENGINE TYPE: TF RATED OUTPUT (F_{oo}) (kN): 120.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	СО	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	29.6	26.0	1.9
AS % OF ORIGINAL LIMIT	2.4 %	25.1 %	24.3 %	8.4 %
AS % OF CAEP/2 LIMIT (NOx)			30.4 %	
AS % OF CAEP/4 LIMIT (NOx)			35.2 %	
AS % OF CAEP/6 LIMIT (NOx)			39.6 %	
AS % OF CAEP/8 LIMIT (NOx)			45.7 %	

DATA STATUS

TEST ENGINE STATUS

- PRE-REGULATION x NEWLY MANUFACTURED ENGINES

CERTIFICATION X DEDICATED ENGINES TO PRODUCTION STANDARD

REVISED (SEE REMARKS) - OTHER (SEE REMARKS)

EMISSIONS STATUS

X

CURRENT ENGINE STATUS

<u>FUEL</u>

DATA CORRECTED TO REFERENCE (IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

(ANNEX 16 VOLUME II)

- OUT OF PRODUCTION
- OUT OF SERVICE

MEASURED DATA

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F ₀₀)						
TAKE-OFF	100	0.7	0.855	0.02	0.22	18.77	1.3
CLIMB OUT	85	2.2	0.705	0.02	0.27	11.16	1.17
APPROACH	30	4.0	0.242	0.04	2.74	8.67	1.31
IDLE	7	26.0	0.088	0.28	21.4	4.63	1.25
LTO TOTAL FUEL (kg) or EMISSIONS (g) 324			43	3130	2852	-	
NUMBER OF ENGINES			2	2	2	2	
NUMBER OF TESTS			4	4	4	4	
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)			0.36	25.97	23.64	1.6	
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			0.05	1.3	1.02	0.15	
RANGE $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$ 0.31				0.31 to 0.4	24.40 to 27.25	22.35 to 24.64	1.47 to 1.82

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.8 to 98.8
TEMPERATURE (K)	274.6 to 279.8
ABS HUMIDITY (kg/kg)	.0020 to .0032

SPEC	JET A
H/C	1.9
AROM (%)	16.5

MANUFACTURER: GE Aviation
TEST ORGANIZATION: GE Aviation
TEST LOCATION: PTO, Ohio, USA

TEST DATES: FROM 21 Nov 16 TO 02 Dec 16

REMARKS

- 1. Ref. REPORT CRL 2201_1/Rev. 0
- 2. Engine S/N 600-104, 600-105
- 3. SMOKE NUMBER for each LTO mode is average of max SN for test points around that power setting
- 4. AVERAGE SN (MAX) is average of maximum smoke number measured from all points on each run
- 5. Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
- 6. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

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

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