



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2A3  
UNIQUE ID NUMBER: 1GE018  
COMBUSTOR:  
ENGINE TYPE: TF

BYPASS RATIO: 5.1  
PRESSURE RATIO ( $\pi_{00}$ ): 31.6  
RATED THRUST ( $F_{00}$ ) (kN): 262.2

## REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	14.2	59.0	54.8	9.1
AS % OF ORIGINAL LIMIT	72.6	50.0	53.1	50.3
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			66.3	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			78.0	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			88.1	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			102.6	

## DATA STATUS

- PRE-REGULATION  
- CERTIFICATION  
x 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)

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

## MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	2.457	0.06	0.58	34.50	7.8
CLIMB OUT	85	2.2	2.003	0.08	0.56	25.46	5.1
APPROACH	30	4.0	0.649	0.19	2.07	9.93	2.3
IDLE	7	26.0	0.202	8.94	41.51	3.92	3.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			838	2874	13611	13074	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				10.9	51.8	49.8	7.8
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.3	3.0	0.4	1.3
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				9.85-12.32	49.18-54.56	49.63-50.42	6.3-8.6

## ACCESSORY LOADS

POWER EXTRACTION 0 (kW)  
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS  
AT - POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-97.8
TEMPERATURE (K)	287-296
ABS HUMIDITY (kg/kg)	0.0084-0.014

## FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company  
TEST ORGANIZATION: CF6 Eval Engineering  
TEST LOCATION: Site IIIC, PTO, Peebles, Ohio  
TEST DATES: 29/05/1985-03/06/1985

## REMARKS

1. Ref GE Report R86AEB143.
2. Engine S/N's 690105 and 690005/2.

Compliance with Fuel Venting requirements:

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