



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: NK-86A
UNIQUE ID NUMBER: 1KK004
COMBUSTOR:
ENGINE TYPE: MTF

BYPASS RATIO: 1.1
PRESSURE RATIO (π_{00}): 13.2
RATED THRUST (F_{00}) (kN): 130.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	69.6	148.2	53.4	
AS % OF ORIGINAL LIMIT	355.2	125.6	80.5	
AS % OF CAEP/2 LIMIT (NO _x)			100.6	
AS % OF CAEP/4 LIMIT (NO _x)			133.2	
AS % OF CAEP/6 LIMIT (NO _x)			151.4	
AS % OF CAEP/8 LIMIT (NO _x)			201.8	

DATA STATUS

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

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
- DEDICATED ENGINES TO PRODUCTION STANDARD
x 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 ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	2.050	0.20	1.80	15.70	
CLIMB OUT	85	2.2	1.700	0.20	2.20	12.40	
APPROACH	30	4.0	0.600	2.20	7.80	5.80	
IDLE	7	26.0	0.235	15.30	38.00	3.10	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			821	5988	15703	6106	-
NUMBER OF ENGINES				1	1	1	
NUMBER OF TESTS				2	2	2	10
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				45.2	120.7	46.1	
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)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	102.3
TEMPERATURE (K)	270
ABS HUMIDITY (kg/kg)	0.00238

FUEL

SPEC	TS-1
H/C	2
AROM (%)	19

MANUFACTURER: KKBM
TEST ORGANIZATION: KKBM
TEST LOCATION: Samara City
TEST DATES: 04/10/1987

REMARKS

1. For Il-86 aircraft.
2. In-service engine(s), tested before overhaul.

Compliance with Fuel Venting requirements:

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