ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	D-30KU-154	BYPASS RATIO:	2.3
UNIQUE ID NUMBER:	1AA004	PRESSURE RATIO (π_{oo}):	17.0
COMBUSTOR:			
ENGINE TYPE:	MTF	RATED THRUST (F_{oo}) (kN):	107.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO_X	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	53.1	292.8	40.4	
AS % OF ORIGINAL LIMIT	270.9	248.1	54.5	
AS % OF CAEP/2 LIMIT (NO_X)			68.2	
AS % OF CAEP/4 LIMIT (NO_X)			87.4	
AS % OF CAEP/6 LIMIT (NO_X)			99.3	
AS % OF CAEP/8 LIMIT (NO_X)			127.0	

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

-    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 ($\%F_{oo}$)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg) HC	CO	NO_X	SMOKE NUMBER
TAKE-OFF	100	0.7	1.420	0.40	3.00	14.50	
CLIMB OUT	85	2.2	1.100	0.50	3.60	11.60	
APPROACH	30	4.0	0.420	1.90	18.20	5.10	
IDLE	7	26.0	0.207	12.70	77.70	2.90	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			629	4389	27627	4000	-
NUMBER OF ENGINES				2	2	2	
NUMBER OF TESTS				2	2	2	
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				40.8	257.0	36.7	
SIGMA (D_p/F_{oo} in g/kN, or SN)				5.0	21.8	2.5	
RANGE (D_p/F_{oo} 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)	102.3-102.6
TEMPERATURE (K)	289-291
ABS HUMIDITY (kg/kg)	0.01119

FUEL

SPEC	TS-1
H/C	2
AROM (%)	18

MANUFACTURER:	Aviadvigatel
TEST ORGANIZATION:	State Inst for Civ Aviation
TEST LOCATION:	Sheremetjevo, Moscow
TEST DATES:	04/07/1989

REMARKS

    1. Data obtained on aircraft (Tu-154M)
    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)