COMANDO DA AERONÁUTICA DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO CENTRO TÉCNICO AEROESPACIAL

TYPE CERTIFICATE DATA SHEET № EA-2005T15

Type Certificate Holder:

BERIEV AIRCRAFT COMPANY

1, Aviatorov sq. Taganrog, 347923

RUSSIA

(See NOTE 6)

EA-2005T15

Sheet 01

BERIEV

Be-103

August 2005

This data sheet, which is part of Type Certificate No. 2005T15, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model Be-103 (Normal Category), approved on 03 August 2005.

ENGINE 2 (two) Teledyne Continental Motors, Model IO-360ES4

FUEL Aviation gasoline octane grade 100LL.

ENGINE LIMITS 210 shaft horsepower, 2 800 rpm

PROPELLER AND PROPELLER MTV-12-D-C-F-(R)/CFR183-17

LIMITS Propeller speed: 2800 rpm

Constant speed, hydraulically actuated, feathering.

OIL See AMM Number A103.1.0000.000.AMM

AIRSPEED LIMITS (CAS) Never Exceed (V_{NE}): 129 knots (239 km/h)

Structural Cruising (V_{NO}): 129 knots (239 km/h) Maneuvering (V_A): 115 knots (213 km/h) Single engine minimum control speed - 62 knots (115 km/h)

Air (V_{MC}) :

L. G. extended (V_{LE}): 98 knots (182 km/h)

C. G. RANGE 17% - 22% MAC

From 5.045 m (198.6 in) to 5.173 m (203.7 in) aft of datum

EMPTY WEIGHT C. G. RANGE (Theoretical) 5.321 m (209.5 in), see Flight Manual (record of

weight and balance) for actual

DATUM Datum station line 830 mm (32.7 in) aft of frame No. 2

LEVELING MEANS Ref. Section 008.10.00 Maintenance Manual

MAXIMUM WEIGHT Takeoff: 2 270 kg (4 998 lb)

Landing: 2 270 kg (4 998 lb) Zero Fuel: 2 217 kg (4 888 lb) Ramp: 2 278 kg (5 022 lb)

NUMBER OF SEATS 6 (including pilot)

MAXIMUM BAGGAGE 50 kg (110 lb) 6.06 m (238.6 in) from datum.

FUEL CAPACITY Total: 327.82 liters (86.6 U.S. gal), 245 kg (540 lb)

OIL CAPACITY 7.52 liters (8 quarts) per engine

MAXIMUM OPERATING

ALTITUDE

Maximum allowed flight altitude without O₂ equipment: 3 000 m

(10 000 ft)

Maximum Take-off Field Elevation: 900 m (3 000 ft)

TEMPERATURE OPERATING Land operations

LIMITS

Land operations From -30° C (-22° F) to 40° C (105° F) Water operations From 5° C (41° F) to 40° C (105° F)

CONTROL SURFACE Elevator: Up 14° ±1° Down 6° ±1°

MOVEMENTS Horizontal stabilizer Nose down 4°48' Nose up 6°40'

angular deflection from trim actuator:

Horizontal tail movement relative to the neutral position Rudder: Right $27^{\circ} \pm 1^{\circ}$ Left $27^{\circ} \pm 1^{\circ}$ Rudder trim: Right $15^{\circ} \pm 1^{\circ}$ Left $15^{\circ} \pm 1^{\circ}$ Aileron: Up $25^{\circ} \pm 1^{\circ}$ Down $25^{\circ} \pm 1^{\circ}$

S/N'S ELIGIBLE A Certificate of

A Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for a Brazilian Certificate of

Airworthiness is made.

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an IAC-AR Export Certificate on Airworthiness (See Note 6), including the following statement:

"The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 2005T15 and in condition of safe operation".

The CTA Report H.10-2170-00, dated 03 August 2005 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)

CERTIFICATION BASIS

Brazilian Type Certificate No.2005T15 issued on 03 August 2005 based on the:

- RBHA 23, which endorses the FAR 23 effective 01 February 1965, as amended by 23-1 through 23-54.
- RBHA 36, which endorses the FAR 36 effective 18 November 1969, including Amendments 36-1 through Amendment 36-24.

PRODUCTION CERTIFICATION

IAC-AR Production Certificate No. OP 62-PVS (O? 62-???) KNAAPO-Komsomolsk-On-Amur Aircraft Production Association Joint Stock Company

Komsomolsk-on-Amur, RUSSIA (See NOTE 6)

REQUIRED EQUIPMENT

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane.

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DATA PERTINENT TO ALL MODELS:

NOTES:

NOTE 1 Weight and balance.

Current Weight and Balance data including list of equipment included in the certification empty weight and loading instructions, when necessary, must be provide for each airplane at the time of original certification, and remain with the airplane at all time thereafter. The certificated empty weight and corresponding center of gravity locations must include the following: Unusable fuel of 4 kg (8.8 lb), 5.7 liters (1.5 U.S. gal)

NOTE 2 <u>Markings and placards</u>.

Airplane operation must be in accordance with the Airplane Flight Manual listed above. All placards listed on report H.10-2170-00, issued on 03 August 2005 or further revisions, must be displayed in clear view of the pilot.

NOTE 3 <u>Continuing Airworthness</u>.

Airworthiness Limitations are specified in the Operating Limitations sections of the Flight Manual and Chapter 4 of the Instructions for Continued Airworthiness (Maintenance Manual) and are approved by the IAC-AR and CTA. These Limitations specify mandatory replacement times, and operating limitations, and may not be changed without CTA approval.

Revisions to the Airworthiness Limitations must be approved by the CTA. The inspections, maintenance, repair and painting must be accomplished according to the Maintenance Manual or other procedure acceptable to the CTA/DAC.

- **NOTE 4** The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:
 - 1. The Brazilian Airplane Flight Manual No. A103.1.0000.000 AFM original issue dated 01 June 2005 or further revision.
 - 2. Markings and placards listed on report H10-2170-00 issued on 03 August 2005 or further revisions.
- NOTE 5 Information essential for the proper operation, maintenance and inspection of the airplane is contained in the Model Be-103 Flight Manual and Maintenance Manual.
- NOTE 6 This Type Certificate was issued to the Be-103 model and is limited to new aircraft manufactured by the KNAAPO Komsomolsk-On-Amur Aircraft Production Association only, according to Implementation Procedures between CTA and IAC-AR dated 30 March 2005.

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