DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A55CE
Beriev Aircraft Company

Original Issue

Be-103

July 11, 2003

TYPE CERTIFICATE DATA SHEET No. A55CE

This data sheet, which is part of Type Certificate No. A55CE, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder:	Beriev Aircraft Company 1, Aviatorov sq., Taganrog, 347923 Russia

I. Model Be-103, Twin-engine airplane, (Normal Category), approved July 11, 2003

Engines	2 (ea) Teledyne Continental Motors, Model IO-360ES4
Fuel	Aviation gasoline octane grade 100, 100LL ASTM D910-76 MIL-G-5572 Russian aviation grade fuel B-95/130 GOST 1012-72 100/130 AVGAS 100 - Japan
Engine Limits	210 shaft horsepower, 2800 r.p.m.
Propeller and Propeller Limits	MTV-12-D-C-F-(R)/CFR183-17 Propeller speed: 2800 r.p.m. Constant speed, hydraulically actuated, feathering

Airspeed Limits (IAS)

V_{NE} (Never Exceed)	130 knots	240 km/h
V_{NO} (Structural cruising)	130 knots	240 km/h
V_A (Maneuvering)	116 knots	215 km/h
V_{LE} max. landing gear extension speed	99 knots	183 km/h
V_{MC} single engine minimum control speed	62 knots	115 km/h

C.G. Range	17% - 22% MAC From 198.6 in. (5.045 m) to 203.7 in. (5.173 m) aft of datum
Empty Weight C.G.	(theoretical) 209.5 in. (5.321 m) 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	4998 lbs (2270 kg)

No. of Seats	6 (including pilot)
Maximum Baggage	110 lbs (50 kg) 238.6 in. (9.06 m) from datum
Fuel Capacity	Total: 86.6 U.S. gal, 540 lbs (245 kg)
Oil Capacity	8 qts. (7.52 liters) per engine
Control Surface Movements	Aileron: Up 25°±1° Down 25°±1° Rudder: 27°±1° right, 27°±1° left Rudder trim tab: trailing edge piece Left 15°±1° trailing edge piece Right; 15°±1° Horizontal tail movement relative to the neutral position: Trailing edge piece Up 14°±1° Down 6°±1°
Operational Limitations	Outside temperature at start and take-off: Land operations: from -22°F (-30°C) to 105°F (40°C) Water operations: from 41°F (5°C) to 105°F (40°C) Load Factor: Positive +3.45g Negative -1.45g Under fuel system steady operation conditions near-zero accelerations and negative accelerations up to 5 seconds are allowed. Maximum allowed flight altitude without O_2 equipment: 10,000 ft. (3000 m) Maximum Take-off Field Elevation: 3000 ft. (900 m.)
Service Life Limits	15000 flight hours, or 20 years, whichever comes first.
Serial Nos. Eligible	Airplanes serial numbers 3301 and on, are eligible for import into the United States.
Certification Basis	The regulations (unless otherwise stated) are Title 14 of the Code of Federal Regulations (14CFR): 1) 14 CFR Part 21.29, 21.183(e), and 21.50 effective February 1, 1965 including Amendment 21-1 through 21-78. 2) 14 CFR Part 23 effective February 1, 1965, including Amendments 23-1 through 23-54. 3) 14 CFR Part 36 effective November 18, 1969 , including Amendments 36-1 through Amendment 36-24. Date of Application for U.S. Type Certificate, October 8, 2001. AVIATION REGISTER issued Russian Type Certificate No. CT-204-Be-103, dated December 26, 2001, as described in Aviation Register TCDS No. CT-204-Be-103.

Validation Basis

The applicable airworthiness requirements for a U.S. certification under 14 CFR 21 section 21.29 identified above were established considering the airworthiness requirements applied by the responsible exporting Russian civil aviation authority under the Implementation Procedures authorized by the Agreement between the Government of the Russian Federation and the Government of the United States of America for Promotion of Aviation Safety, dated September 2, 1998.
This Type Certificate was issued pursuant to the certification by the Aviation Register that the Beriev Model Be-103 complies with the above requirements.

Import Requirements

When eligible, a U.S. Standard Airworthiness Certificate may be issued on the basis of an Export Certificate of Airworthiness signed by a representative of the AVIATION REGISTER containing the following statement:

> "The Beriev Model Be-103 aircraft covered by this certificate has been examined, tested, and found to conform to the type design approved under FAA Type Certificate A55CE and is found to be in a condition for safe operation."

Model Be-103 airplane serial numbers No. 3301 and on are eligible for a U.S. Standard Airworthiness Certificate.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification. Such equipment is listed in the current Aviation Register approved Airplane Flight Manual dated June 18, 2003, or later approved revisions.

Service Information

Service bulletins, structural repair manuals, vendor manuals, and overhaul and maintenance manuals, which contain a statement that the document is AVIATION REGISTER approved, are accepted by the FAA.

Aircraft Flight Manuals, which contain a statement that the document is AVIATION REGISTER approved, are considered to be approved by the FAA.

According to the List of Operation and Maintenance, No. A103.1.0000.000D6e, the following documents pertain to the Be-103 airplane:

> Airplane Flight Manual, dated June 18, 2003, or later Aviation Register approved revisions.
>
> Instructions for Continued Airworthiness (Maintenance Manual, original version dated February 22, 2005 or later AVIATION REGISTER approved revisions)
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> Engine manual: Maintenance and Operator's Manual, Teledyne Continental Motors Model IO-360 Series, FAA accepted January 1994.
>
> Propeller manual: Propeller Owners Manual and Log Book No. B-504, Revision 13, JAA/LBA accepted April 12, 2000, and propeller governor P-480-() Manual Revision 5, JAA/LBA accepted March 24, 1999.

NOTES.

NOTE 1. Current weight and balance data including list of equipment included in the certificated empty weight and loading instructions, when necessary, must be provided for each airplane at the time of original certification, and remain with the airplane at all times thereafter. The certificatee empty weight and corresponding center of gravity locations must include the following:

Unusable fuel of 8.8 lbs (4 kg), 1.5 U.S. gal (5.70 liters)

NOTE 2. Airplane operation must be in accordance with the Aviation Register approved Airplane Flight Manual listed above. All placards listed in Section 2 must be displayed in clear view of the pilot.

NOTE 3. Airworthiness Limitations are specified in the OPERATING LIMITATIONS section of the Flight Manual and Chapter 4 of the Instructions for Continued Airworthiness (Maintenance Manual) and are approved by the Aviation Register and the FAA. These LIMITATIONS specify mandatory replacement times, and operating limitations, and may not be changed without FAA approval.

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

NOTE 4. 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 5. All avionics installed in this aircraft must meet the applicable FAA Technical Standard Order (TSO) and/or equivalent FAA approved safety requirements.

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