COMANDO DA AERONÁUTICA DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO CENTRO TÉCNICO AEROESPACIAL

TYPE CERTIFICATE DATA SHEET № EA-2004T02

Type Certificate Holder:

THE BOEING CO.

PO Box 3707 Seattle, WA 98124 UNITED STATES EA-2004T02

Sheet 01

BOEING

757-200

August 2004

This data sheet, which is part of Type Certificate No. 2004T02, 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 757-200 (Transport Category), approved 28 July 2004.

ENGINE 2 Rolls-Royce RB211-535-E4-37,

FUEL See the appropriate Approved Airplane Flight Manual listed in Note 4.

ENGINE LIMITS Model RB211-535-E4-37

Takeoff static thrust standard day, sea level 16 656 (36 720)

conditions (5 min) kg (lb)

Maximum continuous static thrust, standard 16 102 (35 500)

day, sea level conditions kg (lb)

For engine operating limits see engine TC Data Sheet No. 2004T01 for the RR RB211-535-E4-C-37 or the Approved Airplane Flight

Manual.

OIL See the appropriate Approved Airplane Flight Manual listed in Note 4.

AIRSPEED LIMITS (CAS) Maximum operating (V_{MO}) : 350 kcas

 $\begin{array}{ll} \text{Maximum operating (M_{MO}):} & 0.86 \text{ mcas} \\ \text{L. G. operation - retract (V_{LO}):} & 270 \text{ kcas} \\ \text{L. G. extended (V_{LE}):} & 270 \text{ kcas} \\ \end{array}$

For other airspeed limits, see the appropriate Approved Airplane

Flight Manual listed in Note 4.

C. G. RANGE See the appropriate Approved Airplane Flight Manual listed in Note 4.

(Landing Gear Extended)

EMPTY WEIGHT C. G. See the appropriate Approved Airplane Flight Manual listed in Note 4.

RANGE

DATUM Station 0.0, located 4.04 m (159 inches) forward of airplane nose

(B.S.159).

LEVELING MEANS

Two inclinometers, plumb bob support and target (scale), right main gear well.

MEAN AERODYNAMIC

CHORD

5.07 m (199.7 in)

MAXIMUM WEIGHT

See the appropriate Approved Airplane Flight Manual listed in Note 4.

MINIMUM CREW

Two (2) pilot and co-pilot.

MAXIMUM PASSENGERS

For 757-200 airplane the total passenger capacity is limited to:

219 (four pair of type I exits)

239 (three pair of type I exits plus one pair of improved type I exits at

Door No. 2). (See Note 7).

224 (three pair of type I exits plus two pair of type III exits)

MAXIMUM BAGGAGE

See Weight and Balance Manual Boeing Document No. D043N302.

FUEL CAPACITY

See the appropriate Approved Airplane Flight Manual listed in Note 4.

OIL CAPACITY

See the appropriate Approved Airplane Flight Manual listed in Note 4.

MAXIMUM OPERATING

ALTITUDE

12 802 m (42 000 ft)

CONTROL SURFACE MOVEMENTS:

757-200 Series: Control surfaces must be rigged in accordance with Boeing Drawings 251N1001, 251N2001, 251N3001, 251N4001,

251N5001, 254N1001, and 275N2001.

S/N'S ELIGIBLE

Model 256 – 26247, 26248, 26249, 26250.

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an FAA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), 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. 2004T02 and

in condition of safe operation".

The CTA Report H.10-0451-00, dated 17 August 2004 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See Note 5).

CERTIFICATION BASIS

Brazilian Type Certificate Nr. 2004T02 issued on 28 July 2004 based on the RBHA 25 Brazilian Requirements for Aeronautical Certification, which endorses the FAR Part 25 effective 01 December 1978, as amended by 25-1 through 25-45; except the following paragraph which are in the specified amendments:

- RBHA/FAR 25.109 Amendment 25-38;
- RBHA/FAR 25.345 Amendment 24-46;
- RBHA/FAR 25.351(a) Amendment 25-46;

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CERTIFICATION BASIS (Cont.)

- RBHA/FAR 25.365(e)(1) and (2) Amendment 25-54 (Aft cargo compartment);
- RBHA/FAR 25.571 Amendment 25-45;
- RBHA/FAR 25.629 Amendment 25-46;
- RBHA/FAR 25.697 Amendment 25-46;
- RBHA/FAR 25.733 Amendment 25-49;
- RBHA/FAR 25.803(c) and (d) Amendment 25-46;
- RBHA/FAR 25.901(d), 25.1103(a),(b)(2),(d), (e), and (f) Amendment 25-46; and
- RBHA/FAR 25.1142 and 25.1522 Amendment 25-46

RBHA 36 which endorses the FAR Part 36 with Amendments 36-1 through 36-12 effective 01 August 1981.

Special Federal Aviation Regulation 27.

Equivalent safety findings exist with respect to the following regulations:

- RBHA/FAR 25.791 Passenger Information Signs and Placards;
- RBHA/FAR 25.803(c)(8) Emergency Evacuation Demonstration;
- RBHA/FAR 25.807(c) Passenger Emergency Exits;
- RBHA/FAR 25.809(f)(1)(ii) Escape Slide Automatic Erection; RBHA/FAR 25.811(e)(1) Type III Exit Handle Illumination;
- RBHA/FAR 25.811(f)(2) Exit Band Contrast;
- RBHA/FAR 25.811(f) Door Sill Reflectance;
- RBHA/FAR 25.813(C) Emergency Exit Access;
- RBHA/FAR 25.853(c) Compartment Interiors;
- RBHA/FAR 25.1305(a)(4), (a)(6), (c)(1), and (c)(3) Auxiliary Power Unit Instruments:
- RBHA/FAR 25.1415(c) Survival Equipment;
- RBHA/FAR 25.1415(d) Emergency Locator Transmitter (ELT); and
- RBHA/FAR 25.1549(b) Powerplant and Auxiliary Power Unit Instruments.

Exemption:

- Exemption No. 5613 was granted on 05 March 1993 from RBHA/FAR 25.1415(c) for survival kit attachment requirements. (Subject to Operational Procedures).

REQUIRED EQUIPMENT

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

NOTES:

NOTE 1 Weight and balance.

Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions must be in each aircraft at the time of original certification and at all times thereafter except in the case of operators having an approved weight control system.

The aircraft must be loaded so that the C.G. is within specified limits at all times, considering fuel loading and usage, gear retraction, and movement of crew and passengers from their assigned positions.

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NOTE 2 Markings and placards

All placards required in either the FAA-Approved Airplane Flight Manual, the applicable operating rules or the Certification Basis must be installed in the airplane. Required placards in Portuguese are listed on Section 8 of the CTA Acceptance Report H.10-0451-00.

NOTE 3 Continuing Airworthiness.

The FAA-approved Airworthiness Limitations and Certification Maintenance Requirements (Section 9) of Boeing document D622N001-9 lists the required inspection thresholds for certain structural items, the retirement times for safe-life parts, and the Certification Maintenance Requirements (CMR). All Boeing model 757 airplanes must fully comply with the appropriate revision of this section. However, regarding the damage tolerance structural inspections contained in Subsection (B) of this section, all Boeing Model 757-200 airplanes production line number 765 and on, must comply with Revision May 1997, or a later FAA-approved revision. Applicable to all 757-200 airplanes with production numbers lower than 765, the FAA issued Airworthiness Directive AD 2001-20-12, mandating compliance with Revision May 1997 or Revision November 1998 of Section 9. For airplanes affected by these ADs, each subsequent revision to Section 9 must be approved as an alternative method of compliance (AMOC).

- NOTE 4 The aircraft must be operated in accordance with the FAA Approved airplane Manual. Boeing Document No. D631N005 is the basic FAA-Approved Flight Manual for Model 757-200 airplanes powered by RB211-535-E4-37 engines.
- NOTE 5 The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:
 - 1. The Brazilian Airplane Flight Manual Supplement.
 - 2. Markings and placards.
- NOTE 6 Crew procedures identified as required by engineering failure analyses in Document D230N405 must not be changed unless approved by FAA engineering.
- NOTE 7 Door No. 2 must meet the requirements of RBHA/FAR 25.807(a)(7)(ii) through (viii).
- NOTE 8 Certification Maintenance Requirements (CMR): The CMRs are listed in either the FAA-approved Section 9 of the Maintenance Planning Data document D622N001-9 (Airworthiness Limitations and Certification Maintenance Requirements), or the applicable engine Type Certificate Data Sheet. The more restrictive requirement from these two documents shall be in force.
- NOTE 9 There are service bulletins which call for modifications which do not comply with the Type Certification Basis. These service bulletins are listed in Boeing Document D624N001 titled "Service Bulletin 757". The records of airplanes imported into the Brazil should be reviewed to ensure compliance, if the non FAA-approved service bulletins modifications have been installed.
- NOTE 10 The type design reliability and performance of the Model 757-200 series airplanes have been evaluated in accordance with FAA Advisory Circular 120-42A and found suitable for Extended Range Operations with Two-Engine Airplanes (ETOPS) when operated and maintained in accordance with Boeing Document D011N002 "Configuration, Maintenance, and Procedures for Extended Range (ER) Operation Model 757".

- NOTE 11 The aft cargo compartment is certified for a 6.2 square foot opening. The forward cargo compartment is certified for a 5.7 square foot opening. (Reference FAA Letter ANW-120S:8110-5, dated 17 December 1980).
- NOTE 12 The FAA has concluded that the occurrence of any uncontrollable high thrust failure condition, or any of the associated causal failures listed in Boeing Document D332N402. A copy of D332N402 or a listing of reportable failures shall be provided in the Limitations Section, Section 9, of the Maintenance Planning Document.

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