



TYPE CERTIFICATE DATA SHEET Nº EA-9810

Type Certificate Holder:

CESSNA AIRCRAFT CO.
P. O. Box 7704
Wichita, Kansas, 67277
USA

EA-9810-02
Sheet 01

CESSNA
CITATION 750 X

10 October 2011

This data sheet, which is part of Type Certificate No. 9001 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 750 - CITATION (Transport Category), approved 09 October 1998.

ENGINE

For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10:

- Two Rolls-Royce Model AE 3007C, P/N 23057202. Engines controlled by (2 each engine) Full Authority Digital Electronic Control (FADEC). Approved FADEC P/N are the following:

23068354	FADEC Version C7.10
23073176	FADEC Version C7.10
23074070	FADEC Version C7.15
23074072	FADEC Version C7.15
23074535	FADEC Version C7.15
23075295	FADEC Version C8.3
23075296	FADEC Version C8.3
23075297	FADEC Version C8.3
23077287	FADEC Version C9
23077295	FADEC Version C9
23077296	FADEC Version C9
23077297	FADEC Version C9
23077298	FADEC Version C9
23077299	FADEC Version C9

For airplanes serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10:

- Two Rolls-Royce Model AE 3007C1, P/N 230074408. Engines controlled by (2 each engine) Full Authority Digital Electronic Control (FADEC). Approved FADEC P/N are the following:

23075298	FADEC Version C8.3
23075299	FADEC Version C8.3
23075300	FADEC Version C8.3
23077294	FADEC Version C9
23077293	FADEC Version C9
23077292	FADEC Version C9

FUEL

Jet A, Jet A-1 and Jet B per ASTM D 1655, Jet Fuel No. 3 (GB6537-94), JP-4 and JP-5 per MIL-T5624, JP-8 per MIL-T-83133, NATO F34, F35, F40, F43 and F44. EGME (ASTM D 4171, Class 1, or MIL-I-27686) or DIEGME (ASTM D 4171, class 3, or MIL-I-85470) anti-icing additive may be blended into the aircraft fuel in concentrations of not more than 0.15 percent by volume. Mixtures of EGME and DIEGME are permissible if combined concentrations are within limits. JP-5, JP-8, F34 and F44 fuels may have anti-icing additive preblended. Hammonds Biobor JF additive is permitted up to a maximum concentration of 270 parts per million. See Airplane Flight Manual for fueling procedures.

ENGINE LIMITS

	AE 3007C**	AE 3007C1***
Static thrust, standard day, sea level:		
Takeoff	6 442 lb	6 764 lb
Max. Continuous	6 442 lb	6 764 lb
Max. permissible engine rotor operating speeds:		
N1 (Fan) Steady state	100% rpm	100% rpm
N2 (Gas Gen.) Steady state	101.6% rpm	101.6% rpm
Max. permissible interturbine gas temperatures:		
Takeoff (5 min. limit)	888°C / 850°C *	907°C
Max. continuous	850°C	857°C
Starting		
Started assisted	800°C	800°C
Windmill	888°C / 850°C*	888°C
* For airplane serial number 750-0003 through 750-0022 no incorporating Cessna Service Bulletin SB 750-34-04		
** For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10		
*** For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10		

OIL

Synthetic oil conforming to MIL-L-23699D or MIL-L-7808K (below - 40°F (- 40°C))

AIRSPEED LIMITS (CAS)

Maximum operating (V_{MO}): (Calibrated altitudes)	
Sea level to 2 438 m (8 000 ft)	270 kcas
2 438m (8 000 ft) to 9 342m (30 650 ft)	350 kcas
Maximum operating (M_{MO}): (Calibrated Altitudes)	
Above 9 342m (30 650 ft)	0.92 Mach
Maneuvering (V_A) - sea level:	
For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10):	
16 375 kg (36 100 lb)	233 kias
All serial number	
16 194 kg (35 700 lb)	221 kias
15 649 kg (34 500 lb)	217 kias
14 289 kg (31 500 lb)	202 kias
12 928 kg (28 500 lb)	193 kias

**AIRSPEED LIMITS
(CAS) (Cont.)**

11 113 kg (24 500 lb)	177 kias
9 753 kg (21 500 lb)	163 kias
See AFM for variations with weight and altitude and optional configurations.	
Maximum Gust Intensity (V_A)	300 kias (0.92 M)
Flaps extended (V_{FE})	
Stats and/or Flaps 5°	250 kias
Flap 15°	210 kias
Landing position - Full Flaps	180 kias

(For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10)

Minimum control speed - Air (V_{MCA}):	110 kias (15° flap)
Minimum control speed - Ground (V_{MCG}):	109 kias (15° flap)

(For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10)

Minimum control speed - Air (V_{MCA}):	112 kias (15° flap)
Minimum control speed - Ground (V_{MCG}):	111 kias (15° flap)

Landing Gear operating - (V_{LO}):	210 kias
Landing Gear extended (V_{LE}):	210 kias
Maximum tire ground speeds:	
Nose Gear tire	182 knots
Main Gear tire	195 knots
Speed Brakes Extension Speed	No limit
There is no restriction on roll control spoilers (panel # 1, # 2, #9 and # 10)	

**C. G. RANGE
(Landing Gear Extended)**

Maximum Design C. G. limits

(1) Aft limits:

- For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10: 20.50% MAC from 16 194 kg (35 700 lb) to 15 922 kg (35 100 lb); linear variation from 20.50% MAC at 15 922 kg (35 100 lb) to 33.00% MAC at 13 336 kg (29 400 lb); 33% MAC at 13 336 kg (29 400 lb) to 12 136 kg (26 754 lb); linear variation from 33.0% MAC at 12 136 kg (26 754 lb) to 34.42% MAC at 11 658 kg (25 700 lb); linear variation from 34.42% MAC at 11 658 kg (25 700 lb) to 35.00% MAC at 11 462 kg (25 269 lb); 35.00% MAC at 11 462 kg (25 269 lb) to 9 666 kg (21 310 lb).

- For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10: 20.50% MAC from 16 375 kg (36 100 lb) to 15 922 kg (35 100 lb); linear variation from 20.50% MAC at 15 922 kg (35 100 lb) to 33.00% MAC at 13 336 kg (29 400 lb); 33.0% MAC at 13 336 kg (29 400 lb) to 12 136 kg (26 754 lb); linear variation from 33.0% MAC at 12 136 kg (26 754 lb) to 34.42% MAC at 11 657 kg (25 700 lb); linear variation from 34.42% MAC at 11 657 kg (25 700 lb) to 35.00% MAC at 11 462 kg (25 269 lb); 35.00% MAC at 11 462 kg (25 269 lb) to 9 666 kg (21 310 lb).

C. G. RANGE (Cont.)**(2) Forward Limits**

- For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10: linear variation from 15.84% MAC at 16 194 kg (35 700 lb) to 15.00% MAC from 15 922 kg (35 100 lb); 15.00% MAC from 15 922 kg (35 100 lb) to 14 742 kg (32 500 lb); linear variation from 15.00% MAC at 14 742 kg (32 500 lb) to 21.00% MAC 13 381 kg (29 500 lb); 21.00% MAC at 13 381kg (29 500 lb) to 12 701 kg (28 000 lb); linear variation from 21.00% MAC at 12 701 kg (28 000 lb) to 26.16% MAC at 10 149 kg (22 374 lb); linear variation from 26.16% MAC at 10 149 kg (22 374 lb) to 35.00% MAC at 9 666 kg (21 310 lb).
- For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10: linear variation from 16.40% MAC at 16 375 kg (36 100 lb) to 15.00% MAC at 15 922 kg (35 100 lb) to 14 742 kg (32 500 lb); linear variation from 15.00% MAC at 14 742 kg (32 500 lb) to 21.00% MAC at 13 381 kg (29 500 lb); to 12 701 kg (28 000 lb); linear variation from 21.00% MAC at 12 701 kg (28 000 lb) to 26.16% MAC at 10 149 kg (22 374 lb); linear variation from 26.16% MAC at 10 149 kg (22 374 lb) to 35.00% MAC at 9 666 kg (21 310 lb).

EMPTY WEIGHT C. G. RANGE None**DATUM**

Zero reference datum is 468.6 cm (184,5 in) forward of the leveling screw located 6.35 cm (2.50 in) forward of the cabin door frame on Water Line 127.25.

LEVELING MEANS

Outboard floor panel inside of door parallel to B. L. 13.00

MEAN AERODYNAMIC CHORD 301.2 cm (118.6 in) - L. E. of MAC at F. S. 387.60**MAXIMUM WEIGHT**

For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10, and not incorporating Cessna Service Bulletin SB750-32-50:

Takeoff: 16 194 kg (35 700 lb)

Landing: 14 425 kg (31 800 lb)

Zero Fuel: 11 068 kg (24 400 lb)

Ramp: 16 330 kg (36 000 lb)

For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10, or aircraft incorporating Cessna Service Bulletin SB750-32-50:

Takeoff: 16 375 kg (36 100 lb)

Landing: 14 425 kg (31 800 lb)

Zero Fuel: 11 068 kg (24 400 lb)

Ramp: 16 511 kg (36 400 lb)

MINIMUM CREW

For all flights: 2 persons (pilot and co-pilot).

MAXIMUM PASSENGERS

12 passengers maximum.

MAXIMUM BAGGAGE

Tail compartment 318 kg (700 lb) at F .S. 490.0

Floor loading density: 828.8 kg per square meter (170 lb per square foot)

FUEL CAPACITY

Two wing tanks: usable 1 972 liters (521 US Gal) each tank; arm 1 041.6 cm (410.07 in).

Center tank: usable 3361 liters (888 US Gal) usable each tank; 851.7 cm (335.32 in).

See Note 1: for data on unusable fuel.

OIL CAPACITY

Two engine-mounted tanks: total 11.5 liters (12.1 qts) each; (usable) 11.2 liters. (11.8 qts) each; arm 1 383 cm (544.30 in).

See Note 1 for data on unusable oil.

MAXIMUM OPERATING ALTITUDE

15,545 m (51,000 ft)

CONTROL SURFACE MOVEMENTS

To insure proper operation of the airplane, the movement of the various control surfaces must be carefully controlled by proper rigging of the flight control systems. The airplane must, therefore, be rigged in accordance with the appropriate FAA approved rigging specification or Cessna drawing. Specific rigging instructions may also be found in the Model 750 Maintenance Manual (Instructions for Continued Airworthiness), part number 75MM00 (or later approved revision).

Stabilizer: Range of Stabilizer Setting (Leading Edge Position)
Cessna Drawing nr. 6700750

Primary Trim

Max. L.E. Up $1.2^\circ \pm 0.3^\circ$ Max. L.E. Down $-12^\circ \pm 0.6^\circ$

Secondary Trim

Max. L.E. Up $1.2^\circ \pm 0.3^\circ$ Max. L.E. Down $-12^\circ \pm 0.6^\circ$

Elevator: Rigging Spec. Nr. 6760405

Up $18.5^\circ + 0.5/-0^\circ$ Down $14.0^\circ \pm 1^\circ$

Rudder: Rigging Spec. Nr. 6760405

Lower (perpendicular to H. L.)

Right $29.5^\circ \pm 0.5^\circ$ Left $29.5^\circ \pm 0.5^\circ$

Upper (perpendicular H. L.)

Right $17^\circ + 1.5^\circ /-1.0^\circ$ Left $17^\circ + 1.5^\circ /-1.0^\circ$

Rudder trim: Right $11^\circ \pm 1^\circ$ Left $11^\circ \pm 1^\circ$

Aileron: Rigging Spec. Nr. 6760115

(from droop position) Up $15^\circ \pm 0.5^\circ$ Down $15^\circ \pm 0.5^\circ$

Droop position $1.5^\circ \pm 0.5^\circ$ down from faired

Aileron trim: Up $8^\circ \pm 1^\circ$ Down $8^\circ \pm 1^\circ$

Flaps: Cessna drawing Nr. 6700750 and Rigging Spec. No. 6762715

Flap position	Nominal Outboard	Nominal Center	Nominal Inboard	Allowable tolerance
Up	0°	0°	0°	$\pm 0.2^\circ$
5°	5.9°	5.6°	5.2°	$\pm 0.5^\circ$
15°	17.4°	16.5°	15.0°	$\pm 1.0^\circ$
Full	39.0°	37.8°	36.3°	$\pm 2.0^\circ$

CONTROL SURFACE

Speed break: Rigging Spec. Nr. 6760275
Panel 3, 4, 5, 6, 7 & 8 Up: $40^\circ -43^\circ$

MOVEMENTS (Cont.)

Roll Spoilers Rigging Spec. Nr. 6760205
 Panel 1, 2, 9 and 10 Up: 40° -43°

Maximum 1.0° between
 corresponding panels

SERIAL NUMBERS ELIGIBLE

750-0001 and on.
 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 ELEGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of 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. 9810 and in condition of safe operation.”

The CTA Report H.10-2000-00, dated 29 October 1998 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)

CERTIFICATION BASIS

Brazilian Type Certificate Nr. 9810 issued on 28 October 1998 based on the RBHA 25, which endorses the FAR Part 25 effective February 1965, as amended by 25-1 through 25-74; except the following paragraph which are in the specified amendments:

Additions:

RBHA/FAR 25.729 (e) as amended by Amendment 25-75; and 25.1316, as amended by Amendments 25-80

RBHA 36, corresponding to FAR Part 36 effective 01 December 1969 as amended by Amendment 36-1 through 36-21 plus Noise Control Act of 1972.

RBHA 34, corresponding to FAR 34 effective 10 September 1990. Special Conditions as follows.

No. 25-ANM-80, additional requirements for High Altitude Operation (see note 8).

No. 25-ANM-99, additional requirements for protection of Electrical and Electronic Systems from High Intensity Radiated Fields (HIRF)

No. 25-ANM-113, additional requirements for operation with Fly-by-Wire Rudder

Equivalent levels of safety, accepted by ANAC relative to the following requirements:

RBHA/FAR 25.335 (d) and 25.341, Design Discrete Gust Criteria; RBHA/FAR 25.811 (e) (4), Red Arrow Marking for the Main Passenger Door Handle;

RBHA/FAR 25.807 (e), Ditching Emergency Exits for Passenger; RBHA/FAR 25.841 (b) (6), Cabin Pressurization - High Altitude Take-off and Landing Operations;

RBHA/FAR 25.1549 (a) & (c), Digital Turbine Speed;

RBHA/FAR 25.1305, Digital APU Indicators (Oil Pressure, Oil Temperature, Gas Temperature, Tachometer);

CERTIFICATION BASIS

(Cont.)

RBHA/FAR 25.101, 25.105, 25.109, 25.113, 25.115, 25.735 and 25.1587 Accelerate-Stop Distance;
 RBHA/FAR 25.811 (d) (1) and 25.812 (b) (1) (i), Emergency Exit Locator Signs;
 RBHA/FAR 25.201, 25.203 and 25.207, Stall Warning System for flight conditions above 34 500 feet; and
 RBHA/FAR 25.813(e). Emergency Exit Excess Exemptions, accepted by ANAC relative to the following requirements:

- No. 6179, exemption from bird impact requirements of RBHA/FAR 25.571 (e) (1);
- No. 6431, exemption from Engine-out lateral trim requirements of RBHA/FAR 25.161 (d): and
- No. 6432, exemption from the emergency landing dynamic conditions of RBHA/FAR 25.562 for multiple-occupancy, side-facing divans. Expires 30 November 1996; or
- No. 7922, Partial grant of exemption from the general occupant protection requirements of RBHA/FAR 25.785(b) for multiple-occupancy, side facing divans, restricted to airplanes manufactured prior to 01 January 2004.
- No. 7922A, exemption from the general occupant protection requirements of RBHA/FAR 25.785(b) for multiple-occupancy, side-facing divans, (no restriction).

RBHA/ FAR 25.801 ditching not complied with.

Compliance with ice protection has been demonstrated in accordance with RBHA/FAR 25.1419.

Application for Brazilian Type Certificate dated 10 April 1998.

PRODUCTION CERTIFICATION Production Certificate No. 4 amended to add Model 750 effective 04 October 1996. See note 7 for applicable airplane serial numbers.

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 The approved Weight and Balance Manual: part number 75WB-01 (or later approved revision) is applicable to the model 750 serial number 750-0001 through 750-172 not incorporating Cessna Service Bulletin SB 750-71-10. The approved Weight and Balance Manual: part number 75WB-00 (or later approved revision) is applicable to the Model 750 serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10. The airplane must be loaded according to the appropriate FAA Approved Weight and Balance Manual. The list of equipment included in certificate empty weight must be provided for each airplane at the time of original certification:

The certified empty weight and corresponding center of gravity location must include:

Hydraulic fluid

System A (Total)	16.13 kg (35.56 lb)	at + 1165.4 cm (+ 458.82 in)
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System B (Total)	9.97 kg (21.97 lb)	at + 1264.8 cm (+ 497.96 in)
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Unusable Fuel-Wing	29.48 kg (65.0 lb)	at + 977.9 cm (+ 385.00 in)
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NOTE 1	Unusable Fuel-Center	6.80 kg (15.0 lb)	at + 977.9 cm (+385.00 in)
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(cont.)	Trapped Fuel	10.07 kg (22.2 lb)	at + 930.3 cm (+ 366.50 in)
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Engine Unusable Oil	0.45 kg (1.0 lb)	at + 1382.5 cm (+ 544.30 in)
Engine Usable Oil	20.78 kg (45.8 lb)	at + 1382.5 cm (+ 544.30 in) (full)

NOTE 2 Approved Brazilian Airplane Flight Manual 75BR-00 (or later revision) is applicable to the Model 750 serial number 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10. The Brazilian Airplane Flight Manual, corresponds to the FAA approved Airplane Flight Manual: part number 75FMA-00 (or later approved revision) plus the supplement No. 20, is applicable to the Model 750 serial number 750-0173 and on and aircraft incorporating Cessna Service Bulletin 750-71-10. The airplane must be operated according to the appropriate Approved Brazilian Airplane Flight Manual. Required Placards are translated to the Portuguese language and are listed in the Report H.10-2000-00 and were based in a CESSNA document and in the Chapter XI of the Airplane Maintenance Manual part number 75MM00 (or later approved revision).

NOTE 3 Approved Airworthiness Limitations for mandatory compliance retirement life or inspection are included in the Maintenance Manual (Instructions for Continued Airworthiness), part number 75MM00 (or later approved revision), Chapter 4, Airworthiness Limitations.

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 nr. 75BR-00 original dated 19 October 1998 and further revision is the AFM approved by ANAC.
The Brazilian AFM nr. 75BR-00 includes the supplement 20 "Airplanes Certified to Brazilian Configuration" for the airplanes serial number 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10.
The Brazilian AFM for Model 750 serial number 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10, are incorporated in the FAA approved Brazilian AFM part number 75BRA-00 (or later approved revision) except the supplement 20 "Airplanes Certified to Brazilian Configuration".
- 2 Markings and placards approved are those listed in the paragraph 8 of the report nr. H.10-2000-00 "Brazilian Requirements for the Acceptance of the Model 750 X".
- 3 ADF1 and respective indication are required to be fed the emergency bus bar according with Brazilian operating regulations RBHA/FAR 91.205 (d).
- 4 For airplane with configuration of 10 or more passenger excluding seat pilots the following equipments are required to be installed:
 - 4.1 Solid State Flight Data Recorder per RBHA/FAR 135.152.
 - 4.2 Ground Proximity Warning System (GPWS) per RBHA/FAR 135.153.Both equipments are provided per drawing nr. 9530003 Avionics, Brazil Certification Reference Kit.
- 5 In accordance with RBHA/FAR 25.603 (c) a paint color limitation on upper surface of ailerons, spoilers, flaps and elevators with reflectance value of 26 or greater is requested through drawing nr. 4611003 "Exterior Control Model 750" Brazilian ECR 40602 and through Maintenance Manual 750MM Chapter 4 Airworthiness Limitation.
- 6 An escape hatch handle was requested through RBHA/FAR 25.809 (c) to be implemented per drawing nr. 4690072 Rev. N/C "Escape Hatch Handle" and Part List nr. 4690072 Rev. N/C "Escape Hatch Handle".

NOTE 5 All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with requirements of RBHA/FAR 25.333, 25.561, 25.562 and 25.785.
The foam cushion buildup of all seats (crew and passenger) may not be altered unless deviations in

the foam construction are demonstrated by tests to comply with the listed RBHA/FAR 25 paragraphs.

The LH side facing seat lap belt shall have a buckle which opens from the left to right to prevent the buckle's own inertia from causing it to open. Any other configuration must be verified by dynamic requirements.

NOTE 6 Two (2) Honeywell AZ-840 Micro Air Data Computers (MADC) are required equipment. Approved part numbers are listed in the following table:

MADCPart Number	Model 750-xxxx serial range	Service Bulletin
7014700-904	-0003 through -0041	N/A
7014700-604	-0001, -0002, -0042 through -0015	SB 750-34-05 Rev 0,1
7014700-607	-0106 and on	SB 750-34-05 Rev 2

Aircraft with part number 7014700-607 MADCs meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

NOTE 7 Production Certificate No. 4 applies to Model 750 serial numbers 750-0001, 750-0002, 750-0004, 750-0006 and on.

NOTE 8 Model 750 airplanes have been approved for high altitude operations (altitudes above 41 000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as show in the certification basis. This includes modifications, which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 3.98 sq.in.

NOTE 9 The airplane is approved for Category II operations (flight-director autopilot-coupled only). This does not constitute operational approval. Minimum approved integrated computer (IC-800) software is Phase IV (P/N 7017300-31201).



HÉLIO TARQUÍNIO JÚNIOR

(General Manager, Aeronautical Product Certification)