

THE VALIDATION DATA SHEET

EMB-135BJ

赵世让

日期/Date: 2008-05-12

[illegible]

I – 概述 / General

1. CAAC 认可数据单和型号合格证数据单

CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空总局认可数据单 号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date
当前 Current	VTC0113A, R1, May 12, 2008	CTA TCDS No.EA-9606, Issue17, January 2007
历史 History	VTC0113A, R0, Nov.29, 2000	CTA TCDS No.EA-9606, Issue8, December 1999

2. 类别/**Category:** 运输类飞机/Transport
Airplanes

3. 认可当局/**Validation Authority:**
中国民用航空局/CAAC

审定当局/**Certifying Authority:**
巴西民航局/AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL (ANAC) - BRASIL

4. 型号合格证持有人/**Type Certificate Holder:**
EMBRAER-EMPRESA BRASILEIRA DE AERONAUTICA S/A
Address: AV.Brig.Faria Lima,2170
12227-901 Sao Jose dos Campos –SAO PAULO BRAZIL

**II - Model EMB-145ER (Transport Category), approved 29 November 1996,
validated 29 November 1999 by CAAC**

发动机/**ENGINE** 两台罗罗公司发动机型号为：AE3007A,
AE3007A1/1, AE3007A1/2 , AE3007A1 或
AE3007A1P
Two Rolls Royce Corporation models: AE3007A,
AE3007A1/1, AE3007A1/2 , AE3007A1 or
AE3007A1P.
见注释 8: /See Note 8.

辅助动力装置/APU	Sundstrand 公司型号为：T-62T-40C11 或 T-62T-40C14. Sundstrand Aerospace models: T-62T-40C11 or T-62T-40C14.	
燃油/fuel	巴西规范/Brazilian Specification CNP-08/QAV1; ASTM 规范/ ASTM Specification D-1655 JET A or JET A1; 规范/Specification MIL-T-83133A JP-8; 规范/Specification GB6537-94 JET A3.	
辅助动力装置限制/ APU LIMITS	每分钟最大转速/Maximum RPM:	T-62T-40C11 108% T-62T-40C14 104%
	最高排气温度/Maximum EGT:	717°C
	其他限制见 Sundstrand 公司规定 (编号: ESR0921 和 ESR1112.) Other limitations as stated in Sundstrand Doc. No. ESR0921 and ESR1112.	
滑油/OIL	发动机和辅助动力装置/Engine and APU: MIL-L-7808 or MIL-L-23699.	
空速限制 (当量空速) /AIRSPEED LIMITS (EAS)	最大运行速度限制/Maximum Operating Limit Speed (V_{MO}):	
	- 0 a 2 438 米/m:	463 km/h (250 节/ keas)
	- 2 438 a 3 048 米/m:	See (1).
	- 3 048 a 8 015 米/m:	593 km/h (320 节 keas)
	- 8 015 a 11 278 米/m:	0.78 马赫/ Mach
	机动速度/Maneuvering Speed (V_A):	370 km/h (200 节 keas)
	最大襟翼放下速度/Maximum Flap Extended Speed (V_{FE})	
	- 起飞/进近/Takeoff/approach (9°):	463 km/h (250 节 keas)
	-起飞/进近/Takeoff/approach (18°)	370 km/h (200 节 keas)
	- -起飞/进近/着陆 /Takeoff/approach /landing (22°):	370 km/h (200 节 keas)
	- 着陆/Landing (45°):	269 km/h (145 节 keas)
	最大起落架运行速度/Maximum Landing Gear Operating Speed (V_{LO}):	

空速限制（当量空速） （续）/AIRSPEED LIMITS (EAS) (Cont.)	- 收回/Retraction - 放下/Extension	370 km/h (200 节 keas) 463 km/h (250 节 keas)
	最大起落架放下速度/Maximum Landing Gear Extended Speed (V_{LE}):	463 km/h (250 节 keas)
	(1)线性变化从 2438 米至 3048 米/ from 2 438 m to 3 048 m.	Linear variation
重心范围/C. G. RANGE (起落架放下) (Landing Gear Extended)	20 700 公斤/kg: 20 600 公斤/ kg: 15 500 公斤/ kg: 13 000 公斤/ kg: 12 000 公斤/ kg: 给出点之间的线性变化/Straight linear variation between the points given. 起落架收起引起的力矩/Moment due to landing gear retraction: • 117 000 kg x mm (飞机起落架收起重心前移/the aircraft CG is moved forward with the retraction).	15 087 to 15 832 毫米/mm (17.0% to 43.0% MAC) 15 087 to 15 832 毫米/mm (17.0% to 43.0% MAC) 14 944 to 15 832 毫米/mm (12.0% to 43.0% MAC) 14 944 to 15 832 毫米/mm (12.0% to 43.0% MAC) 15 746 毫米/mm (40.0% MAC)
最大重量/ MAXIMUM WEIGHT	滑行/Ramp: 起飞/Takeoff: 着陆/Landing: 零燃油/Zero Fuel:	20 700 kg 20 600 kg 18 700 kg 17 100 kg (见注释 15/see note 15)
最大行李重量 /MAXIMUM BAGGAGE	1 200 kg	
燃油容积/FUEL CAPACITY	最大可用燃油 5146 公升/Maximum usable fuel of 5 146 liters (在+15332 毫米处两个 2573 公升的油箱 /two tanks of 2 573 liters at +15 332 mm). 不可用燃油 54 公升/Unusable fuel of 54 liters (每个 油箱 27 公升/27 liters each tank).	
适用的序列号/SERIAL NUMBERS ELIGIBLE	145004 及其后续的/145004 and subsequent (见注 释 7 和 14/ see Note 7 and 14).	

**III - Model EMB-145LR (Transport Category), approved 20 April 1998,
validated 29 November 1999 by CAAC**

发动机/ENGINE	两台罗罗公司发动机型号为：AE3007A1/1, AE3007A1/2, AE3007A1 或 AE3007A1P. Two Rolls Royce Corporation models: AE3007A1/1, AE3007A1/2, AE3007A1 or AE3007A1P. 见注释 8/See Note 8.		
辅助动力装置/APU	Sundstrand 公司型号为：T-62T-40C11 或 T-62T-40C14. Sundstrand Aerospace models: T-62T-40C11 or T-62T-40C14.		
燃油/FUEL	巴西规范/Brazilian Specification CNP-08/QAV1; ASTM 规范/ASTM Specification D-1655 JET A or JET A1; 规范/Specification MIL-T-83133A JP-8; 规范/Specification GB6537-94 JET A3.		
辅助动力装置限制/APU LIMITS	每分钟最大转速 /Maximum RPM:	T-62T-40C11 108% T-62T-40C14 104%	
	最高排气温度/Maximum EGT:	717°C	
	其他限制见 Sundstrand 公司规定 (编号: ESR0921 和 ESR1112.) Other limitations as stated in Sundstrand Doc. No. ESR0921 and ESR1112.		
滑油/OIL	发动机和辅助动力装置/Engine and APU: MIL-L-7808 or MIL-L-23699.		
空速限制 (当量空速) AIRSPEED LIMITS (EAS)	最大运行速度限制/ Maximum Operating Limit Speed (V_{MO}):		
	- 0 a 2 438 m:		463 km/h (250 节 /keas)
	- 2 438 a 3 048 m:		See (1).
	- 3 048 a 8 015 m:		593 km/h (320 节 /keas)
	- 8 015 a 11 278 m:		0.78 马赫 /Mach

空速限制（当量空速） （续）/AIRSPEED LIMITS (EAS) (Cont.)	机动速度/Maneuvering Speed (V_A):	374 km/h (202 节 /keas)
	最大襟翼放下速度/Maximum Flap Extended Speed (V_{FE})	
	-起飞/进近/Takeoff/approach (9°):	463 km/h (250 节 /keas)
	-起飞/进近/Takeoff/approach (18°):	370 km/h (200 节 /keas)
	-起飞/进近/着陆/Takeoff/approach /landing (22°):	370 km/h (200 节 /keas)
	- 着陆/Landing (45°):	269 km/h (145 节 /keas)
	最大起落架运行速度/Maximum Landing Gear Operating Speed (V_{LO}):	
	- 收回/Retraction	370 km/h (200 节 /keas)
	- 放下/Extension	463 km/h (250 节 /keas)
	最大起落架放下速度 /Maximum Landing Gear Extended Speed (V_{LE}):	463 km/h (250 节/keas)
(1) 线性变化从 2438 米至 3048 米/ Linear variation from 2 438 m to 3 048 m.		

重心范围/C. G. RANGE (起落架放下/Landing Gear Extended)	22 100 公斤/kg:	15 127 to 15 732 毫米/mm (18.4% to 39.5% MAC)*
	22 000 公斤/kg:	15 127 to 15 732 毫米/mm (18.4% to 39.5% MAC)*
	19 300 公斤/kg:	15 050 to 15 732 毫米/mm (15.7% to 39.5% MAC)
	17 100 公斤/kg:	14 989 to 15 832 毫米/mm (13.6% to 43.0% MAC)
	15 500 公斤/kg:	14 944 to 15 832 毫米/mm (12.0% to 43.0% MAC)
	13 400 公斤/kg:	14 944 to 15 832 毫米/mm (12.0% to 43.0% MAC)

12 400 公斤/kg: 15 459 毫米/mm (30.0%
MAC)

给出点之间的线性变化/Straight linear variation
between the points given.

起落架收起引起的力矩/Moment due to landing gear
retraction:

- 124 000 kg x mm (飞机起落架收起重心前移/the
aircraft CG is moved forward with the retraction).

**最大重量/MAXIMUM
WEIGHT**

滑行/Ramp: 22 100 kg*

起飞/Takeoff: 22 000 kg*

着陆/Landing: 19 300 kg*

零燃油/Zero Fuel: 17 900 kg*

见注释 16/*See note 16

**最大行李重量
/MAXIMUM BAGGAGE**

1 200 kg

**燃油容积/FUEL
CAPACITY**

最大可用燃油 6396 公升/Maximum usable fuel of 6
396 liters (在+15153 毫米处两个 3198 公升的油箱
two tanks of 3 198 liters at +15 153 mm).

不可用燃油 44 公升/Unusable fuel of 44 liters (每个
油箱 22 公升/22 liters each tank).

**适用的序列号/SERIAL
NUMBERS ELIGIBLE**

145002, 145003, 145048 及其后续的 /145002,
145003, 145048 and subsequent (见注释 7c 和
14/see Note 7c and 14).

**IV - Model EMB-145MP (Transport Category), approved 04 August 1999,
validated 12 May 2008 by CAAC**

发动机/ENGINE

两台罗罗公司发动机型号为: AE3007A1/1,
AE3007A1/2, AE3007A1 或 AE3007A1P.

Two Rolls Royce Corporation models:
AE3007A1/1, AE3007A1/2, AE3007A1 or
AE3007A1P.

见注解 8: / See Note 8.

辅助动力装置/APU

Sundstrand 公司型号为: T-62T-40C11 或
T-62T-40C14.

Sundstrand Aerospace models: T-62T-40C11 or
T-62T-40C14.

燃油/FUEL	巴西规范/Brazilian Specification CNP-08/QAV1; ASTM 规范/ASTM Specification D-1655 JET A or JET A1; 规范/Specification MIL-T-83133A JP-8; 规范/Specification GB6537-94 JET A3.	
辅助动力装置限制/APU LIMITS	每分钟最大转速/Maximum RPM: 最高排气温度/Maximum EGT: 其他限制见 Sundstrand 公司规定 (编号: ESR0921 和 ESR1112.) /Other limitations as stated in Sundstrand Doc. No. ESR0921 and ESR1112.	T-62T-40C11 108% T-62T-40C14 104% 717°C
滑油 /OIL	发动机和辅助动力装置/Engine and APU: MIL-L-7808 or MIL-L-23699.	
空速限制 (当量空速) /AIRSPEED LIMITS (EAS)	最大运行速度限制/Maximum Operating Limit Speed (V_{MO}): - 0 a 2 438 m: - 2 438 a 3 048 m: - 3 048 a 8 015 m: - 8 015 a 11 278 m: 机动速度/Maneuvering Speed (V_A): 最大襟翼放下速度/Maximum Flap Extended Speed (V_{FE}): -起飞/进近/Takeoff/approach (9°): -起飞/进近/Takeoff/approach (18°): -起飞/进近/着陆/Takeoff/approach /landing (22°): -着陆/Landing (45°): 最大起落架运行速度/Maximum Landing Gear Operating Speed (V_{LO}): -收回/Retraction: -放下/Extension:	463 km/h (250 节/keas) See (1). 593 km/h (320 节/keas) 0.78 马赫/Mach 370 km/h (200 节/keas) 463 km/h (250 节 keas) 370 km/h (200 节 keas) 370 km/h (200 节 keas) 269 km/h (145 节 keas) 370 km/h (200 节 keas) 463 km/h (250 节 keas)

空速限制（当量空速） （续）/AIRSPEED LIMITS (EAS) (Cont.)	最大起落架放下速度/Maximum Landing Gear Extended Speed (V_{LE}): 463 km/h (250 节 keas) (1) 线性变化从 2438 米至 3048 米/Linear variation from 2 438 m to 3 048 m.	
重心范围/C. G. RANGE	21 090 公斤/kg:	15 099 to 15 732 毫米/mm (17.4% to 39.5% MAC)
(起落架放下/Landing Gear Extended)	20 990 公斤/kg:	15 099 to 15 732 毫米/mm (17.4% to 39.5% MAC)
	19 300 公斤/kg:	15 050 a 15 732 毫米/mm (15,7% a 39,5% da CMA)
	17 100 公斤/kg:	14 990 a 15 832 毫米/mm (13,6% a 43,0% da CMA)
	15 500 公斤/kg:	14 944 a 15 832 毫米/mm (12,0% a 43,0% da CMA)
	13 400 公斤/kg:	14 944 a 15 832 毫米/mm (12,0% a 43,0% da CMA)
	12 400 公斤/kg:	15460 毫米/mm (30,0% da CMA)
	给出点之间的线性变化/Straight linear variation between the points given. 起落架收起引起的力矩/Moment due to landing gear retraction: • 117 000 kg x mm (飞机起落架收起重心前移/the aircraft CG is moved forward with the retraction).	
最大重量/MAXIMUM WEIGHT	滑行/Ramp:	21 090 kg
	起飞/Takeoff:	20 990 kg
	着陆/Landing:	19 300 kg
	零燃油/Zero Fuel:	17 900 kg
最大行李重量 /MAXIMUM BAGGAGE	1 200 kg	
燃油容积/FUEL CAPACITY	最大可用燃油 6396 公升/Maximum usable fuel of 6 396 liters (在+15153 毫米处两个 3198 公升的油箱 /two tanks of 3 198 liters at +15 153 mm). 不可用燃油 44 公升/Unusable fuel of 44 liters (每个 油箱 22 公升/22 liters each tank).	
适用的序列号/SERIAL NUMBERS ELIGIBLE	145178 及其后续的/145178 and subsequent.	

V - Model EMB-135BJ (Transport Category), approved 10 December 2001, validated 12 May 2008 by CAAC

发动机/ENGINE	两台罗罗公司发动机型号为: AE3007A1E Two Rolls Royce Corporation model AE3007A1E. (见注释 8 和 12/See Notes 8 and 12).
辅助动力装置/APU	Sundstrand 公司型号为: T-62T-40C14. Sundstrand Aerospace model: T-62T-40C14.
燃油/fuel	巴西规范/Brazilian Specification CNP-08/QAV1; ASTM 规范/ASTM Specification D-1655 JET A or JET A1; 规范/Specification MIL-T-83133A JP-8; 规范/Specification GB6537-94 JET A3.
辅助动力装置限制/APU LIMITS	每分钟最大转速 104% /Maximum RPM: 最高排气温度/Maximum 717°C EGT: 其他限制见 Sundstrand 公司规定 (编号: ESR1112.) Other limitations as stated in Sundstrand Doc. No. ESR 1112.
滑油/OIL	发动机和辅助动力装置/Engine and APU: MIL-L-7808 or MIL-L-23699.
空速限制 (当量空速) /AIRSPEED LIMITS (EAS)	最大运行速度限制/Maximum Operating Limit Speed (V_{MO}): - 0 to 2 438 m: 463 km/h (250 节 keas) - 2 438 to 3 048 m: See (1). - 3 048 to 8 420 m: 593 km/h (320 节 keas) - 8 420 to 11 887 m: 0.80 马赫 /Mach 机动速度/Maneuvering Speed 374 km/h (200 节 keas) (V_A): 最大襟翼放下速度/Maximum Flap Extended Speed (V_{FE}) -起飞/进近/Takeoff/approach 463 km/h (250 keas) (9°):

空速限制（当量空速）（续）	-起飞/进近/Takeoff/approach (18°):	370 km/h (200 keas)
/AIRSPEED LIMITS (EAS) (Cont.)	-进近/着陆/ Approach /landing(22°):	370 km/h (200 keas)
	-进近/着陆/ Approach /landing (22°) 在结冰情况和 in icing conditions and yaw damper off:	333 km/h (180 keas)
	-着陆/Landing (45°):	269 km/h (145 keas)
	最大起落架运行速度/Maximum Landing Gear Operating Speed (V_{LO}):	
	-收回/Retraction	370 km/h (200 keas)
	-放下/Extention	463 km/h (250 keas)
	最大起落架放下速度/Maximum Landing Gear Extended Speed (V_{LE}):	
	(1) 线性变化从 2438 米至 3048 米/ Linear variation from 2 438 m to 3 048 m.	

重心范围/C. G. RANGE (起落架放下/Landing Gear Extended)	22 570 公斤/kg	13 095 to 13 597 毫米/mm
	∗:	(27,5% to 35% MAC)
	22 500 公斤/kg	13 095 to 13 597 毫米/mm
	∗:	(27,5% to 35% MAC)
	18 500 公斤/kg	13 147 to 13 597 毫米/mm
	∗:	(19,3% to 35% MAC)
	14 500 公斤/kg	13 024 to 13 597 毫米/mm
	∗:	(15,0% to 35 % MAC)
	14 000 公斤/kg ∗:	13 024 to 13 597 毫米/mm (15,0% to 35% MAC)
	13 313 公斤/kg	13 319 to 13 597 毫米/mm
	∗:	(25,3% to 35% MAC)
	13 000 公斤/kg	13 453 毫米/mm (30% MAC)
	∗:	
	给出点之间的线性变化/Straight linear variation between the points given.	
	起落架收起引起的力矩/Moment due to landing gear retraction:	
	• 117 000 kg x mm (飞机起落架收起重心前移 /the aircraft CG is moved forward with the retraction).	
	* 见注释 12/ See Note 12.	

**最大重量/MAXIMUM
WEIGHT**

滑行/Ramp: 22 570 kg *

起飞/Takeoff: 22 500 kg *, **

着陆/Landing: 18 500 kg *

零燃油/Zero Fuel: 16 000 kg *

*见注释 12/See Note 12.

** 对于后续的改装。实施 SB 145LEG-25-0078, MTOW 将增加到 22 000 kg (实施 SB 145LEG-25-0079, MTOW 可用进一步增加到 22 500 kg)

** For airplanes Pos-mod. SB 145LEG-25-0078 the MTOW will be 22 000 kg (to increase again the MTOW to 22 500 kg, the SB 145LEG-25-0079 must be incorporated)

**最大行李重量/MAXIMUM
BAGGAGE**

454 kg

燃油容积/FUEL CAPACITY

最大可用燃油10264 公升/Maximum usable fuel of 10 264 liters (在+8 440毫米处两个1112公升前机身油箱/two forward fuselage tanks of 1 112 liters at +8 440 mm, 在13147毫米处两个3198公升翼油箱/two wing tanks of 3 198 liters at +13 147 mm and 在+20293毫米处两个822公升后机身油箱/two aft fuselage tanks of 822 liters at +20 293 mm).

不可用燃油 106 公升/Unusable fuel of 106 liters (前机身油箱 27 公升/forward tanks 27 liters, 翼油箱 44 公升/wing tanks 44 liters and 后机身油箱 35 公升/aft tanks 35 liters).

见注解 12/See Note 12.

**适用的序列号/SERIAL
NUMBERS ELIGIBLE**

145412, 145462 及其后续的/145412, 145462 and subsequent.

适用于 **EMB-145** 系列飞机的数据:

DATA PERTINENT TO ALL EMB-145() MODELS:

发动机限制: **ENGINE**
LIMITS

AE3007A AE3007A1/2
AE3007A1/1 AE3007A1

海平面静态推力 (磅) /SL

Static Thrust (lb):

- 起飞/Takeoff 7 580

- 最大连续/Maximum 6 820

Continuous

转子速度/Rotor Speed

(%):

- 最大/Maximum N1 100 ⁽²⁾

- 最大/Maximum N2 102.5 ⁽³⁾

- N2 (ground/地面) 53.6 a 102.5

涡轮温度/Temperature

Interturbine ITT (°C):

- 起飞/Takeoff 921 ⁽¹⁾ 948 ⁽¹⁾

- 最大连续/Maximum 868 901

Continuous

-开车/ Starting 800 800

滑油温度/Oil

Temperature (°C):

- 最大/Maximum 126

- 正常范围/Normal range 21 a 126

- 开车最小/Minimum for

starting:

oil specified by above -40

MIL-L-23699

oil specified by above -53

MIL-L-7808

滑油压力/Oil Pressure

(psig):

- 最大/Maximum 95 ^{(4) (5) (9)}

稳定状态/Steady State 110

瞬时/Transient 115 ⁽⁶⁾

瞬时/Transient 155

- 最小/ Minimum

N2 大于或等于 88% /N2 48

above or equal to 88%

N2 小于 88%/ N2 below

88% 34

- (1) 时间限制 5 分钟/Time limited to 5 minutes.
- (2) 100 % N1 = 8 700 rpm. (转/分/ rpm)
- (3) 102.5 % N2 = 16 270 rpm. (转/分/ rpm)
- (4) 滑油温度高于 21 度/For oil temperature above 21°C.
- (5) 没有时间限制/No time limit.
- (6) 持续时间限制最大 5 分钟/Duration limited to 5 min maximum.
- (7) 持续时间限制最大 2 分钟/Duration limited to 2 min maximum.
- (8) 必须遵守 SB AE 3007A-79-025 或其等效的 /Must comply with SB AE 3007A-79-025 or equivalent.
- (9) 在冷天开车时, 没有初始滑油压力的最大限制 /During cold day starting, there is no maximum limit on initial oil pressure.
- (10) 用发动机 FADEC 软件 B7.6(或其后续版本) 译版安装 / For airplanes with engine FADEC software version B7.6 installed (or later approved version)

AE3007A1P

海平面静态推力 (磅) /SL Static

Thrust (lb):

- 起飞 Takeoff 8 338
- 最大连续/Maximum Continuous 6 820

转子速度/Rotor Speed (%):

- 最大/Maximum N1 100 ⁽²⁾
- 最大/Maximum N2 102.5 ⁽³⁾
- N2 (ground/地面) 53.6 a 102.5

涡轮温度/Temperature Interturbine

ITT (°C):

- 起飞/Takeoff 948 ⁽¹⁾
- 最大连续/Maximum Continuous 901
- 开车/Starting 800

滑油温度/Oil Temperature (°C):

- 最大/Maximum 126
- 正常范围/Normal range 21 a 126
- 开车最小/Minimum for starting:
oil specified by MIL-L-23699 above -40
oil specified by MIL-L-7808 above -53

滑油压力/Oil Pressure (psig):

- 最大/ Maximum 95 ^{(4) (5) (9)}
- 稳定状态/Steady State 110 ^{(4) (5) (9) (10)}

瞬时/Transient	115	(6)
瞬时/Transient	155	(7) (8)
- 最小/Minimum		
N2 大于或等于 88%/N2 above or equal to 88%	48	
N2 小于 88%/N2 below 88%	34	
(1) 时间限制 5 分钟/Time limited to 5 minutes.		
(2) 100 % N1 = 8 700 rpm. (转/分/ rpm)		
(3) 102.5 % N2 = 16 270 rpm. (转/分/ rpm)		
(4) 滑油温度高于 21 度/For oil temperature above 21°C.		
(5) 没有时间限制/No time limit.		
(6) 持续时间限制最大 5 分钟/Duration limited to 5 min maximum.		
(7) 持续时间限制最大 2 分钟/Duration limited to 2 min maximum.		
(8) 必须遵守 SBAE 3007A-79-025 或其等效的 Must comply with SBAE 3007A-79-025 or equivalent.		
(9) 在冷天开车时, 没有初始滑油压力的最大限制 /During cold day starting, there is no maximum limit on initial oil pressure.		
(10) 用发动机 FADEC 软件 B7.6(或其后续版本) 译版安装 /For airplanes with engine FADEC software version B7.6 installed (or later approved version)		

AE3007A1E

海平面静态推力(磅)/SL Static Thrust

(lb):

- 起飞/Takeoff	8 895
-最大连续/Maximum Continuous	7 354

转子速度/Rotor Speed (%):

-最大/Maximum N1	100 (2)
-最大/Maximum N2	103.8 (3)
- N2 (ground/地面)	57 a 103.8

涡轮温度/Temperature Interturbine IT₁

(°C):

-起飞/Takeoff	970 (1)
-最大连续/Maximum Continuous	935
-开车/Starting	800

滑油温度/Oil Temperature (°C):

-最大/Maximum	126
-正常范围/Normal range	21 a 126
-开车最小/Minimum for starting:	

oil specified by MIL-L-23699	above -40
oil specified by MIL-L-7808	above -54

滑油压力/Oil Pressure (psig):

- Maximum	95 ^{(4) (5) (9)}
稳定状态/Steady State	110 ^{(4) (5) (9)} (10)

瞬时/Transient	115 ⁽⁶⁾
瞬时/Transient	155 ^{(7) (8)}

-最小/Minimum

N2 大于或等于 88%/N2 above or equal to 88%	48
---------------------------------------	----

N2 小于 88%/N2 below 88%	34
------------------------	----

(1) 时间限制 5 分钟/Time limited to 5 minutes.

(2) 100 % N1 = 8 700 rpm. (转/分/ rpm)

(3) 103.8 % N2 = 16 470 rpm. (转/分/ rpm)

(4) 滑油温度高于 21 度/For oil temperature above 21oC.

(5) 没有时间限制/No time limit.

(6) 持续时间限制最大 5 分钟/Duration limited to 5 min maximum.

(7) 持续时间限制最大 2 分钟/Duration limited to 2 min maximum.

(8) 必须遵守 SBAE 3007A-79-025 或其等效的
Must comply with SBAE 3007A-79-025 or equivalent.

(9) 在冷天开车时, 没有初始滑油压力的最大限制
During cold day starting, there is no maximum limit on initial oil pressure.

(10) 用发动机 FADEC 软件 B7.6(或其后续版本)
译版安装/For airplanes with engine FADEC software version B7.6 installed (or later approved version)

基准/datum

A perpendicular plane to fuselage centerline located 13 601 mm forward the center section spar of the wing (wing stub). This spar is located 2 899 mm forward the aft jacking points.

水平测量法/Leveling means

Plumb between the upper part hole and a mark in the lower part of the forward window frame which is located after the emergency exit (15 500 mm of the reference).

平均气动弦长/ MEAN AERODYNAMIC CHORD	2 865 mm. The MAC leading edge is 14 600 mm of the datum.
最大乘客数/ MAXIMUM PASSENGERS	50 (见注释 10/See Note 10)
滑油容量/ Oil Capacity	在+22333 毫米处每个引擎机舱 15.3 公升/15.3 liters in each nacelle at +22 333 mm.
审定基础/ certification basis	见 ANAC TCDS No.EA-9606/Refer to ANAC TCDS No.EA-9606
CAAC 附加技术条件/CAAC Additional Technical Conditions	见注释 18/See Note 18
生产审定/ production certification	在批准的 CHE E-7203-01 下进行生产 /Production approved under CHE E-7203-01 (见注解 14/see note 14).

适用于 EMB-135 系列飞机的数据:

DATA PERTINENT TO ALL EMB-135() MODELS:

发动机限制/ENGINE LIMITS

AE3007

	A1/3	A3	A1P
海平面静态推力 (磅) /SL Static Thrust (lb):			
-起飞/Takeoff	7 580	7 201	8 388
-最大连续/Maximum Continuous	6 820	6 820	6 820
转子速度/Rotor Speed (%):			
-最大/Maximum N1		100 ⁽²⁾	
-最大/Maximum N2		102.5 ⁽³⁾	
- N2 (ground/地面)		53.6 a 102.5	
涡轮温度/Temperature Interturbine ITT (°C):			
-起飞/Takeoff		948 ⁽¹⁾	
-最大连续/Maximum Continuous		901	
-开车/ Starting		800	
滑油温度/Oil Temperature (°C):			
-最大/Maximum		126	

-正常范围/Normal range	21 a 126
- 开车最小/Minimum for starting:	
oil specified by MIL-L-23699	Above -40
oil specified by MIL-L-7808	Above -53
滑油压力/Oil Pressure (psig):	
-最大/Maximum	95 ^{(4) (5) (9)}
稳定状态/Steady State	110 ^{(4) (5) (9) (10)}
瞬时/Transient	115 ⁽⁶⁾
瞬时/Transient	155 ^{(7) (8)}
-最小/Minimum	
N2 大于或等于 88% /N2 above or equal to 88%	48
N2 小于 88%/N2 below 88%	34
(1) 时间限制 5 分钟/Time limited to 5 minutes.	
(2) 100 % N1 = 8 700 rpm.	
(3) 102.5 % N2 = 16 270 rpm.	
(4) 滑油温度高于 21 度/For oil temperature above 21oC.	
(5) 没有时间限制/No time limit.	
(6) 持续时间限制最大 5 分钟/Duration limited to 5 min maximum.	
(7) 持续时间限制最大 2 分钟/Duration limited to 2 min maximum.	
(8) 必须遵守 SBAE 3007A-79-025 或其等效的 Must comply with SBAE 3007A-79-025 or equivalent.	
(9) 在冷天开车时, 没有初始滑油压力的最大限制 During cold day starting, there is no maximum limit on initial oil pressure.	
(10) 用发动机 FADEC 软件 B7.6 (或其后续版本) / For airplanes with engine FADEC software version B7.6 installed (or later approved version)	

AE3007A1E

海平面静态推力(磅)/SL Static

Thrust (lb):

-起飞/Takeoff 8 895

-最大连续/Maximum Continuous 7 354

Continuous

转子速度/Rotor Speed (%):

-最大/Maximum N1 100 ⁽²⁾

-最大/Maximum N2	103.8 ⁽³⁾
- N2 (ground/地面)	57 a 103.8
涡轮温度/Temperature	
Interturbine ITT (°C):	
-起飞/Takeoff	970 ⁽¹⁾
-最大连续/Maximum Continuous	935
-开车/ Starting	800
滑油温度/Oil Temperature (°C):	
-最大/Maximum	126
-正常范围/Normal range	21 a 126
-开车最小/Minimum for starting:	
oil specified by MIL-L-23699	above -40
oil specified by MIL-L-7808	above -54
滑油压力/Oil Pressure (psig):	
-最大/Maximum	
稳定状态/Steady State	95 (4) (5) (9)
	110 4) (5) ((9) (10)
瞬时/Transient	115 ⁽⁶⁾
瞬时/Transient	155 ^{(7) (8)}
-最小/ Minimum	
N2 大于或等于 88% /N2 above or equal to 88%	48
N2 小于 88%/N2 below 88%	34
(1) 时间限制 5 分钟/Time limited to 5 minutes.	
(2) 100 % N1 = 8 700 rpm. (转/分/ rpm)	
(3) 103.8 % N2 = 16 470 rpm. (转/分/ rpm)	
(4) 滑油温度高于 21 度/For oil temperature above 21°C.	
(5) 没有时间限制/No time limit.	
(6) 持续时间限制最大 5 分钟/Duration limited to 5 min maximum.	
(7) 持续时间限制最大 2 分钟/Duration limited to 2 min maximum.	
(8) 必须遵守 SB AE 3007A-79-025 或其等效的 Must comply with SBAE 3007A-79-025 or equivalent.	
(9) 在冷天开车时, 没有初始滑油压力的最大限制 During cold day starting, there is no maximum limit on initial oil pressure.	

	(10) 用发动机 FADEC 软件 B7.6(或其后续版本) 译版安装/For airplanes with engine FADEC software version B7.6 installed (or later approved version)
基准/datum	A perpendicular plane to fuselage centerline located 11 595 mm (EMB-135ER/EL/BJ) or 12 686 mm (EMB-135KE/KL) forward the center section spar of the wing (wing stub). This spar is located 2 899 mm forward the aft jacking points.
水平测量法/Leveling means	Plumb between the upper part hole and a mark in the lower part of the forward window frame which is located after the emergency exit, 13 500 mm (EMB-135ER/EL/BJ) or 14 591 mm (EMB-135KE/KL) of the datum.
平均气动弦长 MEAN AERODYNAMIC CHORD	2 865 mm; the MAC leading edge is 12 594 mm (EMB-135ER/EL/BJ) or 13 685 mm (EMB-135KE/KL) of the datum.
最大乘客数/MAXIMUM PASSENGERS	EMB-135ER/LR: 37 EMB-135KE/KL: 44 EMB-135BJ: 19 (See Note 9).
审定基础/certification basis	见 ANAC TCDS No.EA-9606/Refer to ANAC TCDS No.EA-9606
CAAC 附加技术条件 /CAAC Additional Technical Conditions	见注释 18/See Note 18
滑油容量/Oil Capacity	在+18787 毫米处每个引擎机舱 15.3 公升/15.3 liters in each nacelle at +18 787 mm.
生产审定/production certification	在批准的 CHE E-7203-01 下进行生产/Production approved under CHE E-7203-01.
<u>适用于 EMB-135 系列飞机的数据:</u> <u>DATA PERTINENT TO ALL MODELS EMB-145() AND EMB-135():</u>	
最小飞行机组/MINIMUM CREW	2 (正驾驶和副驾驶/pilot and copilot)

液压滑油/HYDRAULIC FLUID

6 liters in each reservoir.

最大高度/

Maximum AltitudeS

Operating:

- EMB-145 11 278 m
(37 000 ft)
- EMB-135ER/LR/KE/KL: 11 278 m
(37 000 ft)

- EMB-135BJ S/N 145863 and on
(or modified according to SB
145LEG-00-0007): 12 497 m
(41 000 ft)
- EMB-135BJ S/N below 145863: 11 887 m
(39 000 ft)

Takeoff and Landing:

- EMB-135 () except EMB-135
BJ 2 438 m
(8 000 ft)
- EMB-135BJ equipped with
nose landing gear tire 2 895 m
(9 500 ft)
19.5X6.75-8 10PR
- EMB-135BJ not equipped with 2 591 m
nose landing gear tire (8 500 ft)
19.5X6.75-8 10PR
- EMB-145 () except EMB-145
XR 2 438 m
(8 000 ft)
- EMB-145XR 3 048 m
(10 000ft)
- EMB-145XR e EMB-145LR
modified according to SB 3 048 m
(10 000ft)
145-21-042 and 145-32-0093
- EMB-145LR with EOs 4 115 m
(13 500 ft)
145-143102, 145-976190,
145-149308, 145-153411 or
SBs 145-21-0044,
145-25-0299, 145-53-0060,
145-32-0109,and 145-31-0042
incorporated

温度运行限制/

TEMPERATURE
OPERATING LIMITS

Altitude:

Maximum: Minimum:

- Sea level 50°C -54°C
- 7 620 m (25 000 ft) 25°C -54°C
- 10 973 m (35 000 ft) -21,5°C -64°C
- 11 278 m (37 000 ft) -21,5°C -65°C

Straight linear variation between the points given.

**控制面行程/CONTROL
SURFACE MOVEMENTS**

Elevator: ⁽¹⁾	Up 27.0° ±1.0°	Down 16.5° ±1.0 ^(a) Down 14.0° ±1.0 ^(b)
Rudder I: ⁽¹⁾	Right 15.0° ±1.0°	Left 15.0° ±1.0°
Rudder II: ⁽¹⁾⁽³⁾	Right 11.25° ±1.0°	Left 11.25° ±1.0°
Aileron: ⁽¹⁾	Up 25.0° ±1.0°	Down 15.0° ±1.0°
Flaps (outboard): ⁽²⁾	7.5° ±1.0° 45.0° ±1.5° maximum deflection	
Flaps (inboard): ⁽²⁾	9.18° ±0.8° 45.1° ±1.5° maximum deflection	
Stabilizer: ⁽¹⁾	Neutral 0° ±0.5° Up 4.0° +0.5°, -0.0° Down 10.0° +0.5°, -0.0°	
Spring tab: ⁽¹⁾⁽⁴⁾	9.0° to 10.5° up	12.0° to 13.5° ⁽⁵⁾ down 5.5° to 6.5° ⁽⁶⁾ down
Servo tab: ⁽¹⁾⁽³⁾⁽⁴⁾	Up 8.5° ± 0.5° ^(a) Up 7.2 ^(b) ± 0.5°	Down 13.0 ° ± 0.5°
Spoiler (inboard): ⁽¹⁾	52.0° ±2.0°	
Spoiler (outboard): ⁽¹⁾	30.0° ±2.0°	

- (1) Deflections measured normal plane to hinge lines.
- (2) Deflections measured parallel to the fuselage center line and normal to wing reference plane.
- (3) Deflections measured are relative to the main control surface.
- (4) Allowable asymmetry 1° (abating elevator asymmetry).
 - (a) Pre-mod EO 145-056355 or SB 145-27-0043.
 - (b) Pos-mod EO 145-056355 or SB 145-27-0043.
- (5) Pre-mod EO 145-099134 ou BS 145-27-0110.
- (6) Pos-mod EO 145-099134 ou BS 145-27-0110.

必需的设备/REQUIRED EQUIPMENT

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft. The approved equipment are listed in the Embraer Technical Report 145-MS-370. The following CTA approved Aircraft Flight Manual (AFM) must be on board:

- P/N 135/1539, for EMB-135BJ;
- P/N 140/1329, for EMB-135KE/KL; and
- P/N 145/1152, for all EMB-145() and other EMB-135() models.

NOTES:

NOTE 1 重量和平衡/Weight and balance. Current weight and balance report including list of equipment included in certificated empty weight and loading instructions must be provided for each aircraft at the time of original certification. The certificated basic empty weight and corresponding center of gravity location must include the total engine oil, hydraulic fluid and unusable fuel.

NOTE 2 标记标牌/Markings and placards. All markings and placards required by the applicable certification requirements (see Certification Basis) and by the operational requirements must be installed in the appropriate locations.

NOTE 3 持续适航 /Continuing Airworthiness. Except for the EMB-135BJ, all the life limitations are provided in the item A 2.2 of the “Appendix 2”, “Airworthiness Limitation Requirements” of the document MRB 145/1150. Life limitations for the EMB-135BJ are provided in section A 2.2 of “Appendix 2” of the document MPG-1483.

Except for the EMB-135BJ, the mandatory structural maximum inspection interval limits, raised from the damage tolerance analysis, are listed in the item A2.3 of the “Appendix 2 - Airworthiness Limitation Requirements” of the document MRB 145/1150. The structural maximum inspection interval limits for the EMB-135BJ are provided in section A 2.3 of “Appendix 2” of the document MPG-1483.

Except for the EMB-135BJ, all the mandatory systems certification maintenance requirements, raised from the safety analysis, are listed in the “Appendix 1 – Certification Maintenance Requirements” of the document MRB 145/1150. The certification maintenance requirements for the EMB-135BJ are listed in the “Appendix 1 – Certification Maintenance Requirements” of the document MPG-1483.

The Structures Repair Manual 145/1142 is approved and controlled by CTA, and all Service Bulletins issued by Embraer are approved by CTA. An approval statement is stamped in each Service Bulletin.

NOTE 4 所有的 EMB-145() 和 EMB-135()系列均不能在水上迫降。 / All EMB-145() and EMB-135() models are not approved for ditching.

NOTE 5 含有使用者可修改软件的系统是 / The systems containing User Modifiable Software are:

- IC-600 使用者 可修改的清单 / IC-600 User modifiable Check List;
和 FMS 使用者可修改的 Jeppesen 公司数据飞行计划 / and- FMS User Modifiable Jeppesen Data Plan Flight Plans.

CTA 未批准《使用者可修改软件》，该机型航空器营运人所做的 任何修改必须报 CTA 审批 / The “User Modifiable Software” was not approved by CTA; all modifications made by the airplane operator must be submitted to CTA approval.

NOTE 6 批准的发动机与 FADEC 组合清单如下,如经 CTA 批准的不同组合 仅在 Embraer 公司的服务通告中给出, 未经许可不得混用 / Approved engine and FADEC combinations are listed below. Different combinations are allowed only if approved by CTA in Embraer Service Bulletins. No intermixing of FADECs are permitted.

发动机/Engine Model	FADEC P/N	软件版本 /Software Version
AE3007A	23068661 (*)	VI.2
AE3007A	23068689 (*)	VI.6A
AE3007A	23071903 (*)	VI.7
AE3007A1/1	23071903 (*)	VI.7
AE3007A1/1	23068670 (*)	VI.4
AE3007A1/1	23068689 (*)	VI.6A
AE3007A1/1	23073999 (*)	B5.1.1
AE3007A1/1	23076627(*)	B7.5
AE3007A1/1	23078458(*)	B7.6
AE3007A1/1	23078828(*)	B8.0
AE3007A1/2	23068679 (*)	II.2
AE3007A1/3	23072295 (*)	IV.2
AE3007A1/3	23072554 (*)	B4.3
AE3007A1/3	23074002 (*)	B5.1.1
AE3007A1/3	23076630(*)	B7.5
AE3007A1/3	23078445(*)	B7.6
AE3007A1/3	23078836(*)	B8.0
AE3007A1	23068697 (*)	II.6
AE3007A1	23072296 (*)	IV.2
AE3007A1	23074000 (*)	B5.1.1
AE3007A1	23076628(*)	B7.5
AE3007A1	23078457(*)	B7.6
AE3007A1	23078829(*)	B8.0
AE3007A1	23083670(*)	B8.0.5
AE3007A3	23072509 (*)	B4.3A3
AE3007A3	23074003 (*)	B5.1.1
AE3007A3	23076631(*)	B7.5
AE3007A3	23078444(*)	B7.6
AE3007A1P	23072298 (*)	IV.2
AE3007A1P	23074001 (*)	B5.1.1
AE3007A1P	23076629(*)	B7.5
AE3007A1P	23078456(*)	B7.6
AE3007A1P	23078830(*)	B8.0
AE3007A1P	23083671(*)	B8.0.5
AE3007A1E	23076287 (*)	B7.4
AE3007A1E	23076632(*)	B7.5
AE3007A1E	23078443(*)	B7.6
AE3007A1E	23078837(*)	B8.0

(*) 表明微小变化并被认为是已批准/Capital letters indicates minor variations and are considered approved.

- NOTE 7** (a) The airplanes EMB-145ER serial numbers 145014 and 145017 may be converted to the model EMB-145EP if the Embraer Service Bulletin No. 145-00-0001 is accomplished.
- (b) The airplanes EMB-145ER serial numbers 145044 and 145046 may be converted to the model EMB-145MR if the Embraer Service Bulletin No. 145-00-0002 is accomplished.
- (c) The airplanes EMB-145MR serial numbers 145044 and 145046 may be converted to the model EMB-145LR if the Embraer Service Bulletin No. 145-28-0007 is accomplished.

NOTE 8 The engine data plates identifying the engines models installed on all aircraft models, which are the subject of this Type Certificate Data Sheet, may have either the name "Allison Engine Company" or "Rolls Royce Corporation" on them. This is a manufacturer name change only, and does not affect the configuration or certification status of the engines identified in Type Certificate Data Sheet EM-9608.

- NOTE 9** (a) The interior configuration for each EMB-135BJ airplanes serial number, including the maximum number of passengers, is defined and approved in the Embraer technical report 135-IR-708. The seats installation limitations are defined and approved in the Embraer technical report 135-SA-770. For the aircraft S/N 145686 and on the respective reports are 135-IR-1208 e 135-SA-1270.
- (b) All replacement seats (crew and passenger) and foam cushion construction deviations, even though compliant with TSO C127, must be evaluated for their impact to the surrounding seat envelope (i.e. cabinet changes, galley changes, sidewall changes, floor changes, etc.) and for the impact on the certification requirements of the RBHA/FAR 25.562(e)(5) and the applicable parts of the RBHA/FAR 25.803 through 25.815.

NOTE 10 The interior configuration for each EMB-145XR airplanes serial number, including the maximum number of passengers, is defined and approved in the Embraer technical report 145-IR-1106.

NOTE 11 The models EMB-145() and EMB-135() are often referred to in Embraer marketing literature as the “ERJ-145()”, “RJ145()”, “ERJ-135()” or “RJ135()”, plus the designation of the specific model (LR, MR, ER, etc.). The Model EMB-135KE is often referred to in Embraer marketing literature as the “EMB-140ER”, “ERJ-140ER” or “RJ-140ER”. The Model EMB-135KL is often referred to in Embraer marketing literature as the “EMB-140LR”, “ERJ-140LR,” or “RJ-140LR”. The model EMB-135BJ is often referred to in Embraer marketing literature as “Legacy”. These names are strictly marketing designations, and are not part of the official EMB-145() and EMB-135() models designation.

NOTE 12: The following data is applicable to the airplanes EMB-135BJ S/N below 145625:

ENGINE/发动机 Two Rolls Royce Corporation models AE3007A1P. See Note 8.

重心范围/C. G. RANGE	22 270 kg:	13 365 a 13 597 mm (26,9% a 35% da CMA)
起落架放下 / (Landing Gear Extended)	22 200 kg:	13 365 a 13 597 mm (26,9% a 35% da CMA)
	18 500 kg:	13 147 a 13 597 mm (19,3% a 35% da CMA)
	14 500 kg:	13 024 a 13 597 mm (15,0% a 35 % da CMA)
	14 000 kg:	13 024 a 13 597 mm (15,0% a 35% da CMA)
	13 313 kg:	13 319 a 13 597 mm (25,3% a 35% da CMA)
	13 000 kg	13 453 mm (30% da CMA)

最大重量 / MAXIMUM WEIGHT	滑行/Ramp:	22 270 kg
	起飞/Takeoff:	22 200 kg*
	着陆	18 500 kg
	/Landing:	
	零燃料/Zero Fuel:	16 000 kg

*For airplanes Pos-mod. SB 145LEG-25-0078 the MTOW will be 22 000 kg (to increase again the MTOW to 22 200 kg, the SB 145LEG-25-0079 must be incorporated)

燃油容量/FUEL Maximum usable fuel of 10 152 liters (two

CAPACITY forward fuselage tanks of 1 056 liters at +8 440 mm, two wing tanks of 3 198 liters at +13 147 mm and two aft fuselage tanks of 822 liters at +20 293 mm).
Unusable fuel of 106 liters (forward fuselage tanks 27 liters, wing tanks 44 liters and aft fuselage tanks 35 liters).

NOTE 13 保留/Reserved

NOTE 14 The EMB-145 ER and LR models with serial numbers listed on Embraer technical report 145-MS-467 "List of serial numbers manufactured by HEAI" were manufactured by the associated facility Harbin Embraer Aircraft Industry (HEAI) – China, according to production certificate CHE E-7203-01.

NOTE 15 The airplanes models EMB-145ER and EMB-145EP, when modified by Embraer Service Bulletin N° 145-53-0064, have a Maximum Zero Fuel Weight of 17 350 kg.

NOTE 16 The following data is applicable to the airplanes model EMB-145LR modified according to Service Bulletin N° 145-00-0032:

重心范围/C. G. RANGE 起落架落下 /(Landing Gear Extended)	22 700 kg:	15 127 to 15 732 mm (19,0% to 38.5% MAC)
	22 600 kg:	15 127 to 15 732 mm (19.0% to 38.5% MAC)
	19 300 kg:	15 050 to 15 732 mm (15.7% to 39.5% MAC)
	17 100 kg:	14 989 to 15 832 mm (13.6% to 43.0% MAC)
	15 500 kg:	14 944 to 15 832 mm (12.0% to 43.0% MAC)
	13 400 kg:	14 944 to 15 832 mm (12.0% to 43.0% MAC)
	12 400 kg:	15 459 mm (30.0% MAC)

最大重量 /MAXIMUM WEIGHT	Ramp:	22 700 kg
	Takeoff:	22 600 kg
	Landing:	19 800 kg
	Zero Fuel:	18 400 kg

NOTE 17 From the airplanes Serial Number 145801 and on, the identification serial number changed with the inclusion of two more digits (for example, the Serial Number 145802 turned into 14500802).

NOTE 18 1. The Chinese fuel mainly used for civil aviation is No. 3 Jet fuel (GB 6537-94). The fuel needs to be approved for the airplanes before its operation in China.

2. As per CCAR 21.29(e), All literal markings and placards on an airplane used for advising, warning, or notifying passengers must be at least in Chinese; all literal markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.

3. As per Airworthiness Management Document No. AA2002093, the pilot compartment doors and the security considerations should comply with:

§25.772 Pilot compartment doors

For an airplane that has a lockable door installed between the pilot compartment and the passenger compartment:

(a) For airplanes with a maximum passenger seating configuration of more than 20 seats, the emergency exit configuration must be designed so that neither crewmembers nor passengers require use of the flightdeck door in order to reach the emergency exits provided for them; and

(b) Means must be provided to enable flight crewmembers to directly enter the passenger compartment from the pilot compartment if the cockpit door becomes jammed.

(c) There must be an emergency means to enable a flight attendant to enter the pilot compartment in the event that the flightcrew becomes incapacitated.

§ 25.795 Security considerations

(a) Protection of flightdeck. If a flightdeck door is required by operating rules, the door installation must be designed to:

(1) Resist forcible intrusion by unauthorized persons and be capable of withstanding impacts of 300 Joules (221.3 foot-pounds) at the critical locations on the door, as well as a 250 pound (1113 Newtons) constant tensile load on the knob or handle, and

(2) Resist penetration by small arms fire and fragmentation

devices to a level equivalent to level IIIa of the National Institute of Justice Standard (NIJ) 0101.04.

4. Quick Access Recorder (QAR) must be installed on each aircraft (reference to CAD97-MULT-38).

5. Altimeter should display flight altitude with the metric system.

End