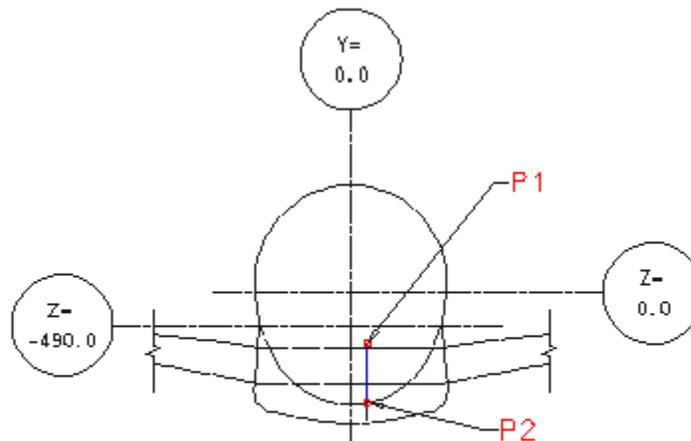


<u>Airspeed Limits (I.A.S.)</u>	V_{MO}	300 KIAS from sea level to 8,000 ft increasing linearly to 320 KIAS at 10,000 ft												
	V_{MO} M_{MO}	320 KIAS from 10,000 ft to 28,887 ft 0.82 from 28,887 ft to 41,000 ft												
	V_A (Maneuvering)	240 KIAS from sea level, increasing linearly to 245 KIAS at 20,000 ft., 269 KIAS at 28,888 ft., and to 286 KIAS at 33,999 ft.												
	V_A (Maneuvering)	0.82 Mach from 33,999 ft. to 41,000 ft.												
	V_{FE} (Flaps Extended)	<table border="0"> <tr><td>Detent 1</td><td>230 KIAS</td></tr> <tr><td>Detent 2</td><td>215 KIAS</td></tr> <tr><td>Detent 3</td><td>200 KIAS</td></tr> <tr><td>Detent 4</td><td>180 KIAS</td></tr> <tr><td>Detent 5</td><td>180 KIAS</td></tr> <tr><td>Detent FULL</td><td>165 KIAS</td></tr> </table>	Detent 1	230 KIAS	Detent 2	215 KIAS	Detent 3	200 KIAS	Detent 4	180 KIAS	Detent 5	180 KIAS	Detent FULL	165 KIAS
Detent 1	230 KIAS													
Detent 2	215 KIAS													
Detent 3	200 KIAS													
Detent 4	180 KIAS													
Detent 5	180 KIAS													
Detent FULL	165 KIAS													
	Maximum Landing Gear Operating Speed (V_{LO})	250 KIAS												
	Maximum Landing Gear Extended Speed (V_{LE})	250 KIAS												
	Tire Speed	225 MPH												

Datum A perpendicular plane to the fuselage centerline, located at 11650 mm ahead of the wing stub front spar. This spar is located 373 mm ahead of the wing jack points.

Mean Aerodynamic Chord The MAC length is 3194 mm.

Leveling Means Plumb line between the points P1 and P2 located inside of the landing gear compartment on the left side, as illustrated below.



LEVELING OF FUSLG COORDINATE POINTS			
POINT	X	Y	Z
P1	14935.36	-246.60	-768.91
P2	14935.36	-246.60	-1675.09

II. Model ERJ 170-100 LR (Transport Category Airplane) approved February 20, 2004

Same as model ERJ 170-100 STD, except for the following items:

<u>Maximum Weights</u>	Max Ramp Weight:	82,363 lb (37,360 kgf)
	Max Takeoff Weight:	82,011 lb (37,200 kgf)
	Max Landing Weight:	72,311 lb (32,800 kgf)
	Max Zero Fuel Weight:	65,257 lb (29,600 kgf)

Center of Gravity Limits Refer to AFM No. AFM-1385

III. Model ERJ 170-100 SU (Transport Category Airplane) approved May 14, 2004

Same as model ERJ 170-100 LR, except for the following item:

Maximum Passenger Seating Capacity 76

IV. Model ERJ 170-100 SE (Transport Category Airplane) approved September 17, 2004

Same as model ERJ 170-100 LR, except for the following item:

Maximum Passenger Seating Capacity 70

DATA PERTINENT TO ALL MODELS EXCEPT AS INDICATEDImport Requirements

To be considered eligible for operation in the United States, each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): The [insert aircraft model and series] covered by this certificate conforms to the type design approved under U.S. Type Certificate No. A56NM, TCDS Revision [insert number], dated [insert date] and is found to be in a condition for safe operation.

Certification Basis **14 CFR part 25**, effective February 1, 1965, including the following amendments:

- Amendments 25-1 through 25-101 in entirety
- Amendment 25-102, §§ 25.981(a) and (b), H25.4 only
- Amendments 25-103 through 25-105 in entirety
- Amendment 25-106, §§ 25.795(a)(1) and (a)(2) only
- Amendment 25-107, § 25.731(d) and (e); § 25.735(a) through (g), and (i) through (k) only
- Amendments 25-108 and 25-109 in entirety

Special Conditions:

No. 25-231-SC, consisting of the following subject:

- Engine Torque Loads for Sudden Engine Stoppage
- Operation without Normal electrical Power
- Interaction of Systems and Structure

No. 25-223-SC, consisting of the following subject:

- High Intensity Radiated Fields

No. 25-241-SC, consisting of the following subjects:

- Electronic Flight Controls; Control Surface Position Awareness
- Performance Credit for Automatic takeoff Thrust Control System during Go-Around

No. 25-250-SC, consisting of the following subject:

- Electronic Flight Controls; Command Signal Integrity

NOTE: The FAA Special Conditions referenced above may be accessed at internet location:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgSC.nsf/MainFrame?OpenFrameSet

Equivalent Level of Safety Findings:

- § 25.331(c)(2): Pitch Maneuver Conditions (documented in FAA Memo TC00561B-T-HES-13)
- §§ 25.1301, 25.1309: Equipment, Systems, and Installations (documented in FAA Memo TC00561B-T-HSI-15)
- § 25.933(a)(1)(ii): Flight Critical Thrust Reverser (documented in FAA Memo TC00561B-T-HPR-06)
- 14 CFR part 25 subparts E, F, & G requirements applicable to APU installations: APU Certification Rules (documented in FAA Memo TC00561B-T-P-4)
- 14 CFR part 25 Appendix I25.4(a): ATTCS - Reduction in initial power setting to less than 90% of takeoff thrust (documented in FAA Memo TC00561B-T-HDE-16)
- 14 CFR part 25 Appendix I25.5(b)(4): ATTCS - Deactivation control (documented in FAA Memo TC00561B-T-HPR-23)
- § 25.1305(c)(3): Digital Only Display of Turbine Engine High/Intermediate Pressure Rotor Speed (documented in FAA Memo TC00561B-T-HPR-14)
- § 25.783: Adoption of Draft Harmonized Rules for Fuselage Doors Certification (documented in FAA Memo TC00561B-T-A-6)
- §§ 25.1389(b), 25.1391, 25.1393, 25.1395: Position Light Intensities (documented in FAA Memo TC00561B-T-S-34)

NOTE: The FAA Equivalent Level of Safety Memos referenced above may be accessed at internet location:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgELOS.nsf/MainFrame?OpenFrameSet

Exemptions:

- Exemption No. 8072, 14 CFR part 25, Section 25.901(c) Uncontrollable High Thrust
- Exemption No. 8160, 14 CFR part 25, Section 25.841(a)(2)(ii) Pressurized Cabins
- Exemption No. 8151, 14 CFR part 25, Section 25.831(g) Ventilation (humidity requirement)

NOTE: The FAA Exemptions referenced above may be accessed at internet location:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgEX.nsf/MainFrame?OpenFrameSet

Optional Requirements complied with:

Section 25.1403	Wing icing detection lights
Section 25.1419	Ice protection
Section 25.1421	Megaphones

NOTE: The Model ERJ 170-100 is not approved for extended overwater operation, as Embraer elected to not request approval of the Model ERJ 170-100 for the ditching requirements of 14 CFR 25.801, 25.1411(d), (e), (f), (g), and 25.1415

Environmental Standards complied with:

- FAR Part 36 effective December 1, 1969, including Amendments 36-1 through 36-24.
- FAR Part 34 effective September 10, 1990, including Amendment 34-1 through 34-3.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see the Certification Basis) must be installed in the aircraft. The lists of all equipment as well as optional approved equipment are contained in the Embraer document:

Type Design Standard Document No. 170-100TDSD_01

Airplane Flight Manual

CTA approved Airplane Flight Manual AFM-1385.

Service Information

Service bulletins, repair instructions (letters, drawings, specifications, forms used for transmitting repair descriptions, etc.), structural repair manuals, airplane flight manuals, vendor manuals, and overhaul and maintenance manuals that are published in the English language and indicate applicability to the U.S. approved type designs included in this Type Certificate and that include a statement "CTA Approved" are accepted by the FAA and are considered "FAA Approved."

Additionally, changes to type design that are approved by CTA designated engineering representatives via CTA form FDH-200-06 are also considered FAA approved.

NOTESNOTE 1.

Weight and balance. Current weight and balance report including a form of weight and 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.

All the life limitations are provided in the "Appendix D", "Airworthiness Limitation Items (ALI) – System and Powerplant" of the document MRB-1621.

The mandatory structure certification maintenance requirements, raised from the damage tolerance analysis, are listed in the "Appendix B - Airworthiness Limitation Items (ALI) Structures" of the document MRB-1621.

The mandatory systems certification maintenance requirements, raised from the safety analysis, are listed in the "Appendix A – Certification Maintenance Requirements (CMR)" of the document MRB-1621.

The Structures Repair Manual SRM 1583 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 3.

The systems containing User Modifiable Software are:

- User Partition of the Owner Requirements Table (ORT) of the SATCOM (Satellite Communication System);
- Airline Modifiable Information (AMI) of the Communication Management Function (CMF);
- APM System Setting Data (Airline Operational Data);
- User Application of the Aircraft Condition Monitoring Function (ACMF);

User Modifiable Software is not approved as part of the type design.

NOTE 4.

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 is permitted.

Engine Model	FADEC P/N	Software Version
CF34-8E5	4120T00P31	4.12
	4120T00P32	
CF34-8E5A1	4120T00P31	4.12
	4120T00P32	

NOTE 5. Any new interior configuration affecting the cockpit door access area, including adjacent structures such as galleys and wardrobes, must be submitted for FAA Aircraft Certification Office (ACO) approval, specifically for compliance with 14 CFR 25.809(b). FAA ACO's should coordinate any such changes with the TC issuing office (ANM-116).

NOTE 6. The Model ERJ 170-100 xx is often referred to in Embraer marketing literature as the "Embraer 170 xx", with the appropriate model (LR, STD, etc.) substituted for the "xx". This name is strictly marketing designation and is not part of the official model designations.

NOTE 7 As stated in Exemption No. 8072 (ERJ 170) the FAA has concluded that the occurrence of any uncontrollable high thrust failure condition or any of the associated causal failures listed below, are reportable under §§ 121.703 (c), 125.409 (c), and 135.415(c):

- FADEC – Full Authority Digital Engine Control
- TCQ – Thrust Control Quadrant
- FMU – Fuel Metering Unit

...END...