TYPE CERTIFICATE DATA SHEET Nº EA-9312

Type Certificate Holder:

ATR - GIE Avions de Transport Régional
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FRANCE

EA-9312-12
Sheet 01

ATR

ATR-42-300
ATR-42-320
ATR-42-500
ATR-72-101 / 102
ATR-72-201 / 202
ATR-72-212
ATR-72-212A

05 April 2012

This data sheet, which is part of Type Certificate No. 9312, 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 ATR 42-300 (Transport Category), approved 15 December 1993.

ENGINE	Two Pratt & Whitney Canada, Inc. PW120 turboprop 1 or 2 Pratt and Whitney Canada PW 121 engines may be installed for this model but with the PW 120 operating conditions.
FUEL	ASTM-D1655 Jet A, Jet A1, Jet B and MIL-T-5624 JP-4 & JP-5 conforming to Pratt and Whitney Canada, Inc. Service Bulletin No. 20 004.
FUEL UNBALANCE	Maximum fuel unbalance: 550 kg (1 212 lb)
ENGINE LIMITS	See AFM as listed in Approved Publications
PROPELLER AND PROPELLER LIMITS	Two Hamilton Standard Four Bladed, Model 14SF-5 Blade: SFA13G1-OA (without external blade heater) SFA13M1-OA (with external blade heater) Diameter: 3.96 m (13 ft) nominal Pitch settings at 106.7 cm (42 in) of the axis: Feather: 86° Flight fine: 20° Ground fine: 7° Full reverse: -10° Propeller (Np): Takeoff: 1 200 rpm Max. Continuous:1 200 rpm
OIL	Oil conforming to Pratt and Whitney Canada, Inc. Specification N°. PWA 521 TYPE II (MIL-L-23699). PWC Service Bulletin 20 001 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}): 230 kias
Maximum operating mach (M_{MO}): 0.55
Landing Gear Operation (V_{LO}): 160 kias
Landing Gear Extended (V_{LE}) 160 kias (170 with Mod. 1790)
(For other airspeed limits see AFM as listed in Approved Publications).

CG RANGE

See AFM as listed in Approved Publications.

MAXIMUM WEIGHT

Takeoff weight 16 150 kg (35 605 lb)
Takeoff weight 16 700 kg (36 825 lb) with Service Bulletin Nº 42-08-0001 (Modification 0951) incorporated
Takeoff weight 16 900 kg (37 258 lb) with the mod. 4076 incorporated
For other weights see AFM as listed in Approved Publications.

MINIMUM CREW

Two (pilot and co-pilot).

MAXIMUM PASSENGERS

46 passengers as per DWG. 62S250 20 101
48 passengers as per DWG. 62S250 20 100
50 passengers as per DWG. 62S250 20 105 and DWG. 62S5250 20 108
60, corresponding to the maximum number of passengers used for the emergency evacuation demonstration.
0 for cargo configuration as per document GATR/AC 419.072/89

MAXIMUM BAGGAGE

Forward and rear compartments – see Weight and Balance Manual.

II - Model ATR 42-320 (Transport Category), approved 15 December 1993.

ENGINE

Two Pratt & Whitney Canada, Inc. PW121 turboprop

FUEL

ASTM D1655 Jet A, Jet A1, Jet B and MIL-T-5624 JP-4 & JP-5 conforming to Pratt and Whitney Canada, Inc. Service Bulletin No. 20 004 R3.

ENGINE LIMITS

See AFM listed in Approved Publications

PROPELLER AND PROPELLER LIMITS

Two Hamilton Standard Four Bladed Model 14SF-5
Blade: SFA13G1-0A (without external blade heater)
SFA13M1-0A (with external blade heater)
SFA13U1-0A (with external blade heater)
Diameter: 3.96m (13 ft) nominal
Pitch settings at 106.7cm (42 in) of the axis:
Feather: 86°
Flight fine: 20°
Ground fine: 7°
Full reverse: -10°
Propeller (Np): Takeoff: 1 200 rpm
Max. Continuous: 1 200 rpm

OIL

Oil conforming to Pratt and Whitney Canada, Inc.
Specification N°. PWA 521 TYPE II (MIL-L-23699).
PWC Service Bulletin 20 001 R3 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}): 230 kias
Landing Gear Operation (V_{LO}): 160 kias
Landing Gear Extended (V_{LE}) 160 kias (170 with Mod. 1790)
(For other airspeed limits see AFM as listed in Approved Publications).

CG RANGE

See AFM listed in Approved Publications

MAXIMUM WEIGHT

Takeoff weight 16 150 kg (35 605 lb)
Takeoff weight 16 700 (36 825 lb) with Mod. 0951-SB ATR 42-08-0001 incorporated
Takeoff weight 16 900 kg (37 258 lb) with the mod. 4076 incorporated
For other weights see AFM as listed in Approved Publications

MINIMUM CREW

Two (Pilot and co-pilot)

MAXIMUM PASSENGERS

46 passengers as per DWG. 62S250 20 101
48 passengers as per DWG. 62S250 20 100
50 passengers as per DWG. 62S250 20 105 and DWG. 62S5250 10 108
60, corresponding to the maximum number of passengers used for the emergency evacuation demonstration
0 for cargo configuration as per document GATR/AC 419.072/89

MAXIMUM BAGGAGE

Forward and Rear compartment–see Weight and Balance Manual for each applicable configuration

III - Model ATR 42-500 (Transport Category), approved 25 April 2005.

ENGINE

Two Pratt & Whitney Canada, Inc. PW127M or PW127E turboprop or PW127F after incorporate the Pratt & Whitney Service Bulletin PW No 21589 or PW 127F after embodiment of service bulletin PW N° 21667 or Two Pratt & Whitney Canada, Inc. PW127 M.

FUEL

ASTM-D1655 Jet A, Jet A1, Jet B and MIL-T-5624 JP-4 & JP-5 conforming to Pratt and Whitney Canada, Inc. Service Bulletin No. 20 004.

FUEL UNBALANCE

Maximum fuel unbalance: 550 kg (1 212 lb)

ENGINE LIMITS

See AFM as listed in Approved Publications

PROPELLER AND PROPELLER LIMITS

Two Hamilton Standard Six Bladed, Model 568 F-1

Blade: R 815 505-2 or
R 815 505-3
R 815505-4 or
R 815505-5 or
R 815505-6 or
R 815505-7

Diameter: 3.96 m (13 ft) nominal

Pitch settings at 147.32 cm (58 in) of the axis:

Feather: 78.5°
Flight fine: 14°
Ground fine: 0°
Full reverse: -14°
Propeller (Np): Takeoff: 1 200 rpm
Max. Continuous:1 200 rpm

OIL

Oil conforming to Pratt and Whitney Canada, Inc.

Specification N°. PWA 521 TYPE II (MIL-L-23699).
PWC Service Bulletin 20 001 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}):	250 kias
Maximum operating mach (M_{MO}):	0.55
Landing Gear Operation (V_{LO}):	160 kias
Landing Gear Extended (V_{LE})	170 kias/180 kias (*)

(For other airspeed limits see AFM as listed in Approved Publications).
(*) with embodiment of modification 4462

C. G. RANGE

See AFM as listed in Approved Publications.

MAXIMUM WEIGHT

	kg	lb
Taxi weight	18 770	41 380
Take off weight	18 600	41 005
Landing weight	18 300	40 344
Zero fuel weight	16 700	36 817

MINIMUM CREW

Two (pilot and co-pilot).

MAXIMUM PASSENGERS

46 passengers as per DWG 62S250 18227
60, corresponding to the maximum number of passengers used for the emergency evacuation demonstration

MAXIMUM BAGGAGE

Forward and rear compartments – see Weight and Balance Manual.

DATA PERTINENT TO ALL MODELS:

DATUM

Station 0 (2 362 mm (93 in) forward of fuselage nose).

LEVELING MEANS

Clinometer on the cabin seat track rails.

FUEL CAPACITY

	liters	U.S. gal	kg	lb
Usable:	5 700	1 514	4 500	9 920
Unusable:	27	7	21.2	46.7
Total:	5 727	1 521	4 521	9 967

OIL CAPACITY

Per engine:
Usable: 3.8 liters (1 US gal)
Total: 17.8 liters (4.7 US gal)

MAXIMUM OPERATING ALTITUDE

7 620 m (25 000 ft) (pressure altitude)

CONTROL SURFACE MOVEMENTS

See Aircraft Maintenance Manual, chapter 27.

SERIAL NUMBERS ELIGIBLE

Serial number 014 and subsequent.

IMPORT REQUIREMENTS

A Brazilian Airworthiness Certificate may be issued on the basis of a "Certificat de Navegabilitè pour Exportation" issued by "Direction Generale de l'Aviation Civil "(DGAC) of France, 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. 9312 and in condition of safe operation".

OUTSIDE AIR TEMPERATURE LIMITS

See AFM as listed in Approved Publications

CERTIFICATION BASIS

ATR42-300 and –320

RBHA 25 corresponding to the 14 CFR Part 25 dated 01 February 1965, including amendments 25-1 through 25-54.

Additional Airworthiness Requirements:

- RBHA 36 Amendment 36-1 thought 36-12 equivalent to ICAO Annex 16, First Edition Volume 1, Chapter 3, applicable on 26 November 26 1981 (equivalent to 14 CFR Part 36 with amendments 36-1 through 36-12 effective 01 August 1981) for the ATR 42-300 and amendment 36-1 through 36-15 for the ATR 42-320.
- SFAR 27 dated 12 December 1973, including amendments 27-1 through 27-5.
- Voluntary compliance with RBHA/14 CFR Part 25.832, amendment 25-56.

Special Conditions

The following special conditions, equivalent safety items and exemptions adopted by FAA have been reviewed and accepted by the Brazilian Authority:

- Automatic take-off power control system (ATPCS). Ref. FAA Special FAR 25.904, amendment 25-62 for the ATR 42-320.

Items of Equivalent Safety

- Pilot Compartment View RBHA/14 CFR Part 25.773(b)(2).
- Emergency Exits RBHA/14 CFR Part 25.807(c) and (d)
- Fire Protection of Flight Controls, Engine Mounts, and Other Flight Structure. RBHA/14 CFR Part 25.865

Exemptions

- RBHA/14 CFR Part 25.571(e) (2) Propeller Debris (ref. FAA Exemption No. NM-104 granted 19 April 1984)

Compliance with the following additional optional requirements has been established:

- Ice Protection Provision – JAR 25.1419
- Structural Provisions for Ditching: JAR 25.801 (b) (c) (d) (e)

Category II Approach JAR AWO Subpart 2

Compliance with the optional requirements JAR 25.1411(d)(e) and JAR 25.1415 (b)(c)(d) for Ditching Provisions has not been established.

CERTIFICATION BASIS (Cont.)

ATR42-500

No later regulations or special conditions are recognized at this time as being necessary to provide an adequate TC basis for this amendment of TC project.
The V_{SIG} project will involve an equivalent safety finding to a number of sections and / or paragraphs in 14 CRF Part 1 and Part 25. Issue Paper F-2, applicable to the V_{SIG} project, addresses this equivalent safety finding issue.
The equivalent safety finding approach has been used on previously accomplished 1-G stall speed (V_{SIG}) projects. Therefore, the certification basis established at the time of the original type certificate of the ATR 42 series airplanes shown on TCDS A53EU, with an additional equivalent safety finding for the V_{SIG} project, will provide an acceptable TC basis for this Amendment of TC project.

REQUIRED EQUIPMENT

- The basic required equipment as prescribed in the applicable airworthiness requirements (See Type Approval Basis) must be installed in the aircraft.
  The equipment whose installation is approved is listed in the Brazilian Type Definition and in the approved modifications applicable to these models.
- Airplane Flight Manual as listed in Approved Publications.

NOTES:

NOTE 1

Weight and balance.

(a) Current weight and balance report including list of equipment, entitled "Aircraft Inspection Report", 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 systems. ATR Report, "Weight and Balance Manual", contains loading information for each airplane and interior arrangement configuration as delivered. This report contains, or refers to, information relative to location and capacity of all cargo and baggage compartments, buffets, storage spaces and coat rooms, location and capacity of lounges, lavatories, and the required placards in the passenger compartment.

(b) The airplane 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.

(c) The weights of system fuel and oil, as defined below, and hydraulic fluid, all of which must be included in the airplane empty weight, are listed for each airplane in the Weight and Balance Manual specified in paragraph (a) above.

(d) System fuel is the weight of all fuel required to fill all lines and tanks up to zero-fuel point on the fuel gages in the most critical flight attitude, including the unusable tank fuel as defined by RBHA/14 CFR Part 25.959. (The usable fuel in the crossfeed manifold lines, manifolds, and engine that is not part of the system, fuel must be included in the total usable fuel to obtain correct weight and C.G. for takeoff).

NOTE 1 (Cont.)

(e) The unusable fuel is that amount of fuel in the tanks which is unavailable to the engines under critical flight conditions as defined in RBHA/FAR 25.959. This "unusable" fuel is included in System Fuel as indicated in (d) above and need not be accounted for separately.

(f) System oil is the weight of oil remaining in the engine, lines and tanks after subtracting the oil in the tanks which is above the standpipe (zero gauge) levels. The engine oil capacities shown elsewhere in this data sheet include only the useable oil for which the tanks must

NOTE 2

Markings and placards. All markings and placards for passenger information, external markings for emergency, load limits in cargo and baggage compartments must be presented in Portuguese or bilingual.
For the approved markings and placards translations contact the TC holder or STC holder (as applicable) and/or ANAC at the following address: normas.aeronaves@anac.gov.br

NOTE 3

Continuing Airworthiness. Components, which are life limited, are listed in Section 13 - Certification Maintenance Requirements of the Maintenance Planning Document listed in Approved Publications.
Compliance with the tasks and intervals specified in Section 13 Certification Maintenance Requirements of the Maintenance Planning Document listed in Approved Publications is required to ensure continuing compliance with the type approval basis.

NOTE 4

The differences of the Brazilian airplanes in relation to the basic French DGAC Type Certificate N° 176 are summarized below:

1. The Brazilian Airplane Flight Manual is the DGAC approved Airplane Flight Manual
2. Markings and placards: contact the TC holder or STC holder (as applicable) and/or ANAC at the following address: normas.aeronaves@anac.gov.br.

NOTE 5

Cabin equipment
Seats and galleys must be designed in accordance:

- with ATR Specifications 419.282/82 and 419.464/82 for ATR 42-300/-320 models,
- with ATR Specifications 419.0008/82 issue 4 and 421.614/94 for ATR 42-500 model.

NOTE 6

The list of modifications permitting use of the ATR42 for Category II approach is contained in Service Letter ATR42-22-5001 for ATR42-300/-320 models. The modification permitting use the ATR42-500 model for Category II approach is 1112.

IV - Model ATR 72-101/-201 (Transport Category), approved 25 April 2005. Model ATR 72-102/-202 (Transport Category), approved 25 April 2005.

ENGINE	Two Pratt & Whitney Canada, Inc. PW124B turboprop
FUEL	(a) The following fuels are eligible for engines MIL-T-5624 Grades JP4 or JP5 ASTM-MD-1655 Grades JET A, JET A1, JET B Conforming to PWC Specification PN A204. (PWC Service Bulletin No. 20.004 details approved conditions).

FUEL (Cont.)

(b) The following types of additives may be used in approved fuels:
- Oxidation inhibitors,
- Corrosion inhibitors,
- Thermal stability additives,
- Metal deactivators,
- Anti icing additives,
- Biocide additives.

List of approved additives, approved concentrations and conditions of use are identified in PWC Service Bulletin No. 20.004.

FUEL UNBALANCE

Maximum fuel unbalance: 750 kg (1 653 lb)

ENGINE LIMITS

See AFM listed in Approved Publications

PROPELLER AND PROPELLER LIMITS

Two Hamilton Standard Four Bladed Model 14 SF 11
Blade:
(without external blade heater) SFA13 J1-OA or SFA13J1ROA
(with external blade heater) SFA13 N1-OA or SFA13N1ROA or SFA13S1POA
SFA13K1-OA or SFA13K1ROA
SFA13S1-OA or SFA13S1ROA
Or Two Hamilton Standard 14SF-11E (mod. 3471) propellers.
Blades with external deicers SFA13S1-OA or SFA13S1ROA or SFA13S1POA
Diameter: 3.96m (13 ft) nominal
Pitch settings at 106.7cm (42 in) of the axis:
Feather: 86°
Flight fine: 20°
Ground fine: 7°
Full reverse: -10°
Propeller (Np): Takeoff: 1 200 rpm
Max. Continuous: 1 200 rpm

OIL

The following oils are eligible for engines:
-Synthetic type conforming to PWC specification PWA 521, type II PWC Service Bulletin 20.001 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}): 250 kias
Maximum operating speed (M_{MO}): 0.55 mach
Landing Gear Operation (V_{LO}): 170 kias
Landing Gear Extended (V_{LE}) 185 kias
(For other airspeed limits see AFM as listed in Approved Publications).

C.G. RANGE

See AFM listed in Approved Publications

MAXIMUM WEIGHT

	ATR 72-101/ -102	ATR 72-201/ -202
At taxiing	20 020 kg (44 136 lb)	21 530 kg (47 465 lb)
At take-off	19 990 kg (44 070 lb)	21 500 kg (47 400 lb)
At landing	19 900 kg (43 871 lb)	21 350 kg (47 068 lb)
Without fuel	19 350 kg (42 659 lb)	19 700 kg (43 430 lb)

After embodiment of Mod. 3651 which has no repercussion on the aircraft, the maximum take-off weight is increased to 22 000 kg (48 501 lb) for the following models:

- ATR 72-201 and 72-202 on which Mod 2055 has been embodied.

After embodiment of Mod 3849 which has no repercussion on the aircraft, the maximum zero fuel weight is increased to 20 000 kg (44 071 lb) for the ATR 72-201 and 72-202 models

Simultaneous embodiment of Mod 3651 and Mod 3849 is permitted.

MINIMUM CREW

Two (Pilot and co-pilot)

MAXIMUM PASSENGERS

74, corresponding to the maximum of passengers used for the emergency evacuation demonstration

MAXIMUM BAGGAGE

Forward and Rear compartment – see Weight and Balance Manual for each applicable configuration

V - Model ATR 72-212 (Transport Category), approved 25 April 2005.

ENGINE

Two Pratt & Whitney Canada, Inc. PW127 or PW 127F after embodiment of service bulletin PW N° 21591.

FUEL

(a) The following fuels are eligible for engines
MIL-T-5624 Grades JP4 or JP5
ASTM-MD-1655 Grades JET A, JET A1, JET B
Conforming to PWC Specification PN A204.
(PWC Service Bulletin No. 20.004 details approved conditions).

(b) The following types of additives may be used in approved fuels:

- Oxydation inhibitors,
- Corrosion inhibitors,
- Thermal stability additives,
- Metal deactivators,
- Anti icing additives,
- Biocide additives.

List of approved additives, approved concentrations and conditions of use are identified in PWC Service Bulletin No. 20.004 R3.

FUEL UNBALANCE

Maximum fuel unbalance: 750 kg (1 653 lb)

ENGINE LIMITS

See AFM as listed in Approved Publications

PROPELLER AND PROPELLER LIMITS

a) Basic Installation

Two Hamilton Standard four Bladed, 247F-1

Blade: R 810640-2 or R817370-1

Or Two Hamilton Standard four bladed, 247F-1E (Mod. 3973) propellers.

Blade: R817370-1

Diameter: 3.96 m (13 ft) nominal

Pitch settings at 152.4 cm (60 in) of the axis:

Feather: 78.5°

Flight fine: 12.6°

Ground fine: -3°

Full reverse: -15.2°

Propeller (Np): Takeoff: 1 200 rpm

Max. Continuous:1 200 rpm

b) Second Source (embodiment of modification 3560)

Two Hamilton Standard four Bladed, 14 SFL11

Blade: SFA 13N1-AO

Diameter: 3.96 m (13 ft) nominal

Pitch settings at 106.68 cm (42 in) of the axis:

Feather: 78.5°

Flight fine: 12.6°

Ground fine: -3°

Full reverse: -15.2°

Propeller (Np): Takeoff: 1 200 rpm

Max. Continuous:1 200 rpm

OIL

The following oils are eligible for engines:

- Synthetic type conforming to PWC specification PWA 521, type II. PWC Service Bulletin 20.001 R3 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}): 250 kias

Maximum operating mach (M_{MO}): 0.55

Landing Gear Operation (V_{LO}): 170 kias

Landing Gear Extended (V_{LE}) 185 kias

(For other airspeed limits see AFM as listed in Approved Publications).

C. G. RANGE

See AFM as listed in Approved Publications.

MAXIMUM WEIGHT

	kg	lb
Taxi weight	21 530	47 465
Take off weight	21 500	47 400
Landing weight	21 350	47 068
Zero fuel weight	19 700	43 430

After embodiment of Mod. 3651 which has no repercussion on the aircraft, the maximum take-off weight is increased to 22 000 kg (48 501 lb) for the following model:

- ATR 72-212 on which Mod 2055 has been embodied and which are equipped with 247F-1 propellers.

After embodiment of Mod 3849 which has no repercussion on the aircraft, the maximum zero fuel weight is increased to 20 000 kg (44 071 lb) for the ATR 72-212 model

Simultaneous embodiment of Mod 3651 and Mod 3849 is permitted.

MINIMUM CREW

Two (pilot and co-pilot).

MAXIMUM PASSENGERS 74, corresponding to the maximum of passengers used for the emergency evacuation demonstration

MAXIMUM BAGGAGE Forward and rear compartments – see Weight and Balance Manual.

VI - Model ATR 72-212A (Transport Category), approved 25 April 2005.

ENGINE Two Pratt & Whitney Canada, Inc. PW127 F or
Two Pratt & Whitney Canada, Inc. PW127 M or
Two Pratt & Whitney Canada, Inc. PW127 M or Pratt & Whitney Canada, Inc. PW127 F.

FUEL

(a) The following fuels are eligible for engines

MIL-T-5624	Grades JP4 or JP5
ASTM-MD-1655	Grades JET A, JET A1, JET B

Conforming to PWC Specification PN A204.
(PWC Service Bulletin No. 20.004 details approved conditions).

(b) The following types of additives may be used in approved fuels:

- Oxydation inhibitors,
- Corrosion inhibitors,
- Thermal stability additives,
- Metal deactivators,
- Anti icing additives,
- Biocide additives.

List of approved additives, approved concentrations and conditions of use are identified in PWC Service Bulletin No. 20.004.

FUEL UNBALANCE Maximum fuel unbalance: 750 kg (1 653 lb)

ENGINE LIMITS See AFM as listed in Approved Publications

PROPELLER AND PROPELLER LIMITS

Two Hamilton Standard six Bladed, 568 F-1

Blade:	R 815505-2 R 815505-3 R 815505-4 or R 815505-5 or R 815505-6 or R 815505-7 R 815505S3W R 815505R3W
Diameter:	3.96 m (13 ft) nominal

Pitch settings at 147.32 cm (58 in) of the axis:

Feather:	78.5°
Flight fine:	14°
Ground fine:	0°
Full reverse:	-14°
Propeller (Np):	Takeoff: 1 200 rpm Max. Continuous:1 200 rpm

OIL

The following oils are eligible for engines:
- Synthetic type conforming to PWC specification PWA 521, type II.

PWC Service Bulletin 20.001 lists approved brand oils.

AIRSPEED LIMITS

Maximum operating (V_{MO}): 250 kias
Maximum operating mach (M_{MO}): 0.55
Landing Gear Operation (V_{LO}): 170 kias
Landing Gear Extended (V_{LE}) 185 kias
(For other airspeed limits see AFM as listed in Approved Publications).

CG RANGE

See AFM as listed in Approved Publications.

MAXIMUM WEIGHT

	Basic	With mod 4671	With mod 5213
Taxi weight	22 180 kg (48 898 lb)	22 670 kg (49 978 lb)	22 670 kg (49 978 lb)
Take off weight	22 000 kg (48 501 lb)	22 500 kg (49 603 lb)	22 500 kg (49 603 lb)
Landing weight	21 850 kg (48 170 lb)	22 350 kg (49 273 lb)	22 350 kg (49 273 lb)
Zero fuel weight	20 000 kg (44 092 kg)	20 300 kg (44 753 lb)	20 500 kg (45 195lb)

NOTE:

1. After embodiment of Mod 5555 which has no repercussion on the aircraft, the maximum take off weight is increased by 300 kg (661 lb) for the ATR 72-212A model.

2. After embodiment of Mod 6219 which has no repercussion on the aircraft, the maximum take off weight is increased by 200 kg (441 lb) for the ATR 72-212A model.

MINIMUM CREW

Two (pilot and co-pilot).

MAXIMUM PASSENGERS

74, corresponding to the maximum of passengers used for the emergency evacuation demonstration

MAXIMUM BAGGAGE

Forward and rear compartments – see Weight and Balance Manual.

DATA PERTINENT TO ALL MODELS:

DATUM

Station 0 (2 362 mm (93 in) forward of fuselage nose).

LEVELING MEANS

Clinometer on the main landing gear fairing.

FUEL CAPACITY

	liters	U.S. gal	kg	lb
Usable: Normal refueling.	6 297	1 664	5 000	11 023
Usable: Refueling with high level cut-off	6 360	1 680	5 050	11 133
Unusable:	38	10	30	66.14

OIL CAPACITY	Per engine: Usable: 3.8 liters (1 US gal) Total: 17.8 liters (4.7 US gal)
MAXIMUM OPERATING ALTITUDE	7 620 m (25 000 ft) (pressure altitude)
CONTROL SURFACE MOVEMENTS	See Aircraft Maintenance Manual, chapter 27.
SERIAL NUMBERS ELIGIBLE	Serial number 014 and subsequent.
IMPORT REQUERIMENTS	A Brazilian Certificate of Airworthiness may be issued on the basis of on a EASA 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. 9312 and in condition of safe operation”.
OUTSIDE AIR TEMPERATURE LIMITS	See AFM as listed in Approved Publications.

CERTIFICATION BASIS

ATR72-101/-102, -201/-202, 212

1. JAR 25 Change 8 and amendment 81-2 including French national variants in effect on 02 February 1982.
2. French ATR-42 Special Conditions.
3. French ATR-72 Special Condition B6 and B7.
4. The Following Section of Part 25 of the far, as Amendments 25-1 through 25-54:

25.2	25.777(g)	25.1309(a),(b)
25.107(d),(e)	25.781	25.1331(a)(3)
25.125	25.785(g)	25.1353(c)(6)
25.201(d)	25.787(a)	25.1401(b)
25.331(c)	25.803(c)(7)	25.1401(f)
25.351(a)(1)	25.809(j)	25.1411(a)(2)
25.361	25.903(a)	25.1415
25.491	25.901	25.1438
25.511(b),(c)	25.905(a)	25.1501
25.571(b)(6),(e)(2)	25.994	25.1513
25.613	25.1013	25.1521(b),(c)
25.615	25.1015	25.1547(c)
25.621	25.1019	25.1549
25.631	25.1093(b)(1),(b)(2)	25.1583(a)(4)
25.671(c)(1)	25.1141(f)(2)	25.1583(1)
25.693	25.1303(b)(4)	25.1585(a)
25.773(b)(3)	25.1305(c)(6)(7)	25.1587(a)
25.777(e)		

The combined requirements shown in 1, 2, 3, and 4 above have been determined to provide a certification basis equivalent to RBHA 25 corresponding to the 14 CFR Part 25 dated 01 February 1965, including amendments 25-1 through 25-54.

5. The applicant has volunteered to comply with the following Sections:

   RBHA/14 CFR Part 25.832 as amended by amendment 25.56.
   RHBA/14 CFR Part 25.812 as amended by amendment 25.58.
   RBHA/14 CFR Part 25.851 as amended by amendment 25.61.
   RBHA/14 CFR Part 25.853 as amended by amendment 25.59.

6. RBHA/14 CFR Part 25.904, as amended by amendment 25-1 through 25-62, in place of FAA Special Conditions dated 11 July 1985, for the ATPCS.

CERTIFICATION BASIS (Cont.)

7. SFAR 27 amendments 27-6.
8. RBHA 36 Amendment 36-1 thought 36-14 equivalent to ICAO Annex 16, First Edition Volume 1, Chapter 3, applicable on 26 November 26 1981 (equivalent to FAR 36 with amendments 36-1 through 36-14 effective 05 February 1988).
9. FAA Exemption 4385 (NM104) regarding Section 25.571(e)(2), granted 19 April 1984 (propeller debris).
10. A finding of regulatory adequacy pursuant to the "Noise Control Act of 1972".
11. FAA findings of equivalent safety for Section 25.773(b)(2).
12. Compliance with the following optional requirements has been established: Ice protection provisions JAR 25.1419.
13. Compliance with the following optional requirements has not been established: Ditching provisions JAR 25.1411(d)(e) and JAR 25.1415(b)(c)(d). JAR 25.801.
14. For precision approach and landing, the applicable technical requirements are complemented by the following FAA Advisory Circular (AC):

    - AC 25-1329-1A for the autopilot;
    - AC 20-57A for autoland;
    - AC 120-29 for Category II; and
    - AC 120.28C with applicable Appendices for Category III.

ATR72-212A

The TC basis for the baseline airplane is RBHA 25 corresponding to the Part 25 of the Federal Aviation Regulations dated 1 February 1965 as emended by amendments 25-1 through and including Amendment 25-54 plus specified Special Conditions, Exemptions and Equivalent Level of Safety Finding. The design changes introduced by ATR 72-212A model are not considered extensive enough to require evaluation.

REQUIRED EQUIPMENT

- The basic required equipment as prescribed in the applicable airworthiness requirements (See Type Approval Basis) must be installed in the aircraft.
- The equipment whose installation is approved is listed in the Brazilian Type Definition and in the approved modifications applicable to these models.
- Airplane Flight Manual as listed in Approved Publications.

NOTES:

NOTE 1 Weight and balance.

(a) Current weight and balance report including list of equipment, entitled "Aircraft Inspection Report", 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 systems. ATR Report, "Weight and Balance Manual", contains loading information for each airplane and interior arrangement configuration as delivered. This report contains, or refers to, information relative to location and capacity of all cargo and baggage compartments, buffets, storage spaces and coat rooms, location and capacity of lounges, lavatories, and the required placards in the passenger compartment.

(b) The airplane 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.

(c) The weights of system fuel and oil, as defined below, and hydraulic fluid, all of which must be included in the airplane empty weight, are listed for each airplane in the Weight and Balance Manual specified in paragraph (a) above.

(d) System fuel is the weight of all fuel required to fill all lines and tanks up to zero-fuel point on the fuel gages in the most critical flight attitude, including the unusable tank fuel as defined by RBHA/14 CFR Part 25.959. (The usable fuel in the crossfeed manifold lines, manifolds, and engine that is not part of the system, fuel must be included in the total usable fuel to obtain correct weight and C.G. for takeoff).

(e) The unusable fuel is that amount of fuel in the tanks which is unavailable to the engines under critical flight conditions as defined in RBHA/14 CFR Part 25.959. This "unusable" fuel is included in System Fuel as indicated in (d) above and need not be accounted for separately.

(f) System oil is the weight of oil remaining in the engine, lines and tanks after subtracting the oil in the tanks which is above the standpipe (zero gauge) levels. The engine oil capacities shown elsewhere in this data sheet include only the useable oil for which the tanks must be placarded.

NOTE 2 Markings and placards. All markings and placards for passenger information, external markings for emergency, load limits in cargo and baggage compartments must be presented in Portuguese or bilingual.
For the approved markings and placards translations contact the TC holder or STC holder (as applicable) and/or ANAC at the following address: normas.aeronaves@anac.gov.br.

NOTE 3 Continuing Airworthiness. Components, which are life limited, are listed in Section 13 - Certification Maintenance Requirements of the Maintenance Planning Document listed in Approved Publications.
Compliance with the tasks and intervals specified in Section 13 Certification Maintenance Requirements of the Maintenance Planning Document listed in Approved Publications is required to ensure continuing compliance with the type approval basis.

NOTE 4 The differences of the Brazilian airplanes in relation to the basic French DGAC Type Certificate N° 176 are summarized below:

1. The Brazilian Airplane Flight Manual is the DGAC approved Airplane Flight Manual.

NOTE 5 Cabin equipment

Seats and galleys must be designed in accordance with ATR Specifications 419.282/82 and 419.464/82 (ATR 72-101/-102, -201/-202, -212 models) or 419.0008/95, issue 4 and 421.614/94 (ATR 72-212A model).

NOTE 6 The modification permitting use of the CAT II approach is:
- Mod 1112 for ATR72
- Mod 5948 for ATR72-212A "-600 Version"

NOTE 7 Modification whose retrofit is mandatory.

1) Modification included in the type definition.
   2334 – Engine debris deflectors to be retrofitted before 10 000 flight hours on the following A/C: 108 – 126 – 140 – 145 – 147 – 150 – 154 – 157 – 162 – 164 – 167 – 171 – 174 – 177 – 180 – 183 – 186 – 189 – 192 – 195 – 198 – 201 – 204 – 207 – 210 – 212 – 215.
2) Modification 1931 or 8019 related to the center wing box must be embodied on A/C: 108 – 126 – 140 – 145 – 147 – 150 – before 10 000 flight hours.

NOTE 9 The reference to designation ATR72-212A "-600 version" is just an ATR commercial designation used by ATR to refer to the basic ATR72-212A aircraft model incorporating the following major changes:

- 05948 ISSUE 5 - INSTALL NEW AVIONIC SUITE GLASS COCKPIT
- 05977 ISSUE 2 - INSTALL NEW FUEL GAUGING SYSTEM IN KG ON ATR 72-212A

Remark:
1) The AFM Supplement for the ANAC corresponds to the AFM ATR72-212A – Temporary Revision nº 40 - EASA AFM approval 10036861 dated 12 October 2011.

NOTE 11 For blades interchangeable / mix refer to the EH-9406-().

NOTE 12 Aerospatiale & Alenia Joint Holders became to ATR - GIE Avions de Transport Régional. However all documents showing the previous names remain valid.

HÉLIO TARQUÍNIO JÚNIOR
Gerente Geral de Certificação de Produto Aeronáutico
(General Manager, Aeronautical Product Certification)