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# TYPE-CERTIFICATE DATA SHEET

No. EASA.A.084

**for**

ATR 42 and ATR 72

**Type Certificate Holder:**

ATR-GIE Avions de Transport Régional

1, Allée Pierre Nadot

31712 Blagnac Cedex

FRANCE

For Models:

ATR 42-200, ATR 42-300, ATR 42-320, ATR 42-400, ATR 42-500

ATR 72-101, ATR 72-102, ATR 72-201, ATR 72-202, ATR 72-211, ATR 72-212, ATR 72-212A



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**SECTION 1: ATR 42 Series****I. General**

## 1. Type/ Model/ Variant

ATR 42-200, ATR 42-300, ATR 42-320, ATR 42-400, ATR 42-500

## 2. Performance Class

A

## 3. Certifying Authority

Primary certification of above aircraft models has been granted by French DGAC under DGAC Type Certificate N° 176 and has been transferred to EASA since 28 September 2003 under EASA Type Certificate A.084.

## 4. Manufacturer

ATR - GIE Avions de Transport Régional  
1, Allée Pierre Nadot  
31712 Blagnac Cedex  
France

## 5. State of Design Authority Certification Application Date

ATR 42-200	: 02 February 1982
ATR 42-300	: 02 February 1982
ATR 42-320	: 27 April 1987
ATR 42-400	: 19 July 1995
ATR 42-500	: 18 May 1993

## 6. EASA Type Certification Application Date

ATR 42-500 '600 version'<sup>(1)</sup> : 18 December 2007

## 7. State of Design Authority Type Certificate Date

ATR 42-200	: 24 September 1985
ATR 42-300	: 24 September 1985
ATR 42-320	: 04 March 1988
ATR 42-500	: 28 July 1995
ATR 42-400	: 27 February 1996

## 8. EASA Type Certification Date

ATR 42-500 '600 version'<sup>(1)</sup> : 14 June 2012

**SECTION 1: ATR 42 Series - Continued**

- (1) ATR 42-500 '600 version' is the designation to identify ATR 42-500 aircraft models having received the ATR New Avionic Suite (NAS) modification, also named as 'Glass Cockpit', which represents the incorporation of ATR Significant Major Change n° 5948 and a batch of associated ATR (major & minor) modifications.

ATR 42-500 '600 version' aircraft is not considered as new aircraft model nor variant.

ATR 42-600 is the commercial designation of the ATR 42-500 aircraft model fitted with NAS modification. This designation must not be used on ATR certified / approved documentation, and only 'Mod 5948', 'ATR 42-500 with Mod 5948', 'ATR 42-500 fitted with NAS' or ATR 42-500 '600 version' must be indicated.

**II. Certification Basis**

1. Reference Date for determining the applicable requirements  
Refer to section I.5
2. State of Design Airworthiness Authority Type Certification Data Sheet No.  
Refer to section I.3
3. State of Design Airworthiness Authority Certification Basis
  - a) ATR 42-200 / -300 / -320 models

JAR 25, Change 8 and Amendment 81/2 inclusive (ref: DGAC-F letter 53.006/SFACT/TC, dated 06 Jan 1983), including the French National Variants.

The applicable technical requirements are referenced through ATR document ref: GATR/C 0001/82 document.

b) ATR 42-400 / -500 models

- JAR 25 change 13 including amendments 90/1, 91/1 and 93/1 for:
  - 25X20 to 25X261, except for 25.101, .105, .109, .113 and .115
  - 25.471 to 25.519
  - NPA 25F-219 "Flight characteristics in icing conditions iss. 2" – 25.1419
  - NPA 25DF-179 "Operation without normal electrical power" – 25.1309(e), .1351(d)  
(as published in O.P. 90/1)
  - NPA 25DF-191 "Miscellaneous requirements" - 25.819(b), .1309(b), .1351(b)(5)(c), .1353(c)(6)(d), .1355(c), .1357(d)(f revoked), .1359(d), .1362, .1363(a), .1431(d).  
(as published in O.P. 90/1)
  - NPA 25D-181 "Resistance to fire terminology" - 25.853(e), .863(b)(4), .867(a).  
(as published in O.P. 91/1)
  - NPA 25D-206 "Emergency exit marking" - 25.811(e)(4)



**SECTION 1: ATR 42 Series - Continued**

(as published in O.P.91/1)

- NPA 25D-227 "Compartment interior" – 25.853(f)  
(as published in O.P. 93/1)

- JAR 25 change 11 including amendments 86/1 and 87/1 for:
  - 25.365 (amendment 86/1)
  - 25.603 (amendment 86/1)
  - 25.812 (amendment 86/1)
  - 25.843 (amendment 86/1)
  - 25.853 (amendment 86/1)
  - 25.571(e)(2) (amendment 87/1)
  - 25.905(d) (amendment 87/1)
- JAR 25 change 11 for:
  - 25.601
  - 25.605 to 25.811, except for 25.785 and .787
  - 25.813 to 25.841
  - 25.851
  - 25.855 to 25X1588
- JAR 25 change 8 including amendment 81/2 for:
  - 25.301 to 25.459, except for 25.365
  - 25.561 to 25.581, except for 25.571(e)(2)
- JAR AWO Subpart 2 change 1 for Cat II approaches  
(ref: DGAC-F letter 53730/SFACT/TC, dated 10 Aug 1983).

On an Elect to Comply basis:

- JAR 25 change 13 for:
  - 25.301 to 25X1587, except for 25.561, .562, .735, .785 and .787  
(Paragraph 25.562 is not part of Certification Basis)
- JAR 25 change 12 for:
  - 25.561
  - 25.785
  - 25.787
- NPA 25 BDG 244 for:
  - 25.101(i)
  - 25.105(c)
  - 25.109
  - 25.113
  - 25.115(a)
  - 25.735(f)(h)
  - 25X1591(a)(b)(c)(d)

The applicable technical requirements for ATR 42-400 /-500 models are respectively referenced through ATR 42-400 CRI A-01 Issue 3 and ATR 42-500 CRI A-01 Issue 4 documents.





**SECTION 1: ATR 42 Series - Continued****4. EASA Airworthiness Requirements****ATR 42-500 '600 version'**

For areas outside of Glass Cockpit perimeter, ATR 42-400 /-500 Certification requirements (as identified in paragraph II.1.b) apply.

For areas within Glass Cockpit perimeter (i.e. related to ATR Modification 5948, and associated ATR modifications), requirements listed here below have to be considered accordingly:

- CS 25 amendment 3, except for 25.561:

**Subpart B**

- 25.255(a)(2)

**Subpart C**

- 25.581

**Subpart D**

- 25.671(b)(c)
- 25.672(a)
- 25.677(b)
- 25.679(a)(2)
- 25.685
- 25.699(a)(b)
- 25.703
- 25.729(e)(f)(3)
- 25.735(d)
- 25.771(a)(c)(e)
- 25.773(a)
- 25.777(f)
- 25.783(e)
- 25.841(b)(5)(b)(6)(b)(8)
- 25.843(b)(3)
- 25.853(a)(d)(e)
- 25.854(a)
- 25.855(h)
- 25.857(b)(3)
- 25.869(a)
- 25.899

**Subpart E**

- 25.1141(f)
- 25.1165(g)
- 25.1203(a)(b)(2)(b)(3)

**Subpart F**

- 25.1301 to 25.1305
- 25.1307(c)(d)(e)



**SECTION 1: ATR 42 Series - Continued**

- 25.1309
- 25.1316
- 25.1321 to 25.1323
- 25.1325(a)(d)(e)(f)
- 25.1326(a)
- 25.1327
- 25.1331
- 25.1333
- 25.1337
- 25.1351(a)(b)(6)(c)(d)
- 25.1353 (a)(b)(c)(6)(d)(e)
- 25.1355 to 25.1360
- 25.1381
- 25.1419(c )
- 25.1431
- 25.1435(b)(1)
- 25.1459

**Subpart G**

- 25.1501
- 25.1523 to 25.1529
- 25.1541 to 25.1549
- 25.1555
- 25.1563 to 25.1587

As per Reversion on Certification Basis: JAR 25 change 13 for 25.561

- CS-AWO Subpart 2 for CAT II approaches

The applicable technical requirements for ATR 42-500 “600 version” are referenced through ATR 42-500 CRI A-1001 issue 4.



**SECTION 1: ATR 42 Series - Continued**

## 5. Special Conditions

## a) ATR 42-200 / -300 / -320 models

Condition Ref	Title	Supporting Ref
O1	Endurance flight campaign	DGAC-F letter 53084/SFACT/TC, dated 17 Jan 1984
B1	Take-off path	n/a
B2	High speed characteristics	n/a
B3	Landing climb / all engines operating	n/a
B4	Static lateral stability	n/a
B5	Stick pusher	n/a
BB1	Automatic take-off power control system	n/a
C3	Pressurized cabin loads	DGAC-F letter 53006/SFACT/TC, dated 06 Jan 1983
C4	Damage tolerance and fatigue evaluation of structure	DGAC-F letter 53006/SFACT/TC, dated 06 Jan 1983
C5	Design airspeeds	DGAC-F letter 53006/SFACT/TC, dated 06 Jan 1983
C6	High lift devices	DGAC-F letter 53006/SFACT/TC, dated 06 Jan 1983
C7	Propeller debris	DGAC-F letter 53006/SFACT/TC, dated 06 Jan 1983
D1	Doors	DGAC-F letter 53730/SFACT/TC, dated 10 Aug 1983
D2	Fire extinguishers	DGAC-F letter 53730/SFACT/TC, dated 10 Aug 1983
D3	Cargo compartment fire detection system	DGAC-F letter 53730/SFACT/TC, dated 10 Aug 1983
D4	Test for pressurized cabins	DGAC-F letter 53730/SFACT/TC, dated 10 Aug 1983
D-16	Heat Release and Smoke Density Requirements to Seat Materials	n/a
E1	Propellers	DGAC-F letter 54011/SFACT/TC, dated 05 Oct 1984
F1	Miscellaneous	DGAC-F letter 53248/SFACT/TC, dated 19 Mar 1985
G1	Instructions for Continued Airworthiness	n/a
H-1	Instructions for Continued Airworthiness for EWIS	n/a



**SECTION 1: ATR 42 Series - Continued**

Special Conditions linked with ATR 42-200 / -300 and -320 optional modifications:

Condition Ref	Title	Supporting Ref
B8	Steep approach capability	n/a
B13 <sup>(*)</sup>	Steep slope approach with reduced landing distances	n/a
C01	Operations on unpaved runways	n/a
D-15	Introduction of towbarless towing	n/a

b) ATR 42-400 / -500 models

Condition Ref	Title	Supporting Ref
O1	Demonstration of endurance (Refer to CRI 01 - issue 00/85)	n/a
B5	Stick pusher (refer to CRI B-02)	n/a
B7	Stall and stall warning speeds and manoeuvre capability	n/a
B10	Clever stall warning / Stick Pusher (Refer to CRI B-03)	n/a
D7	Lightning protection indirect effects	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
D-16	Heat Release and Smoke Density Requirements to Seat Materials	n/a
F2	Low altitude automatic pilot engagement after Take-Off	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
F3	Effect of external radiations upon aircraft systems	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
H-1	Instructions for continued Airworthiness for EWIS	n/a



**SECTION 1: ATR 42 Series - Continued**

Special Conditions linked with ATR 42-500 optional modifications:

Condition Ref	Title	Supporting Ref
C01	Operations on unpaved runways	n/a
B9	Steep approach capability	DGAC-F letter 954144/SFACT/N.AT, dated 19 Oct 1995
B11	Operations on narrow runways	DGAC-F letter 961413/SFACT/N.AT, dated 22 Mar 1996
B13 <sup>(*)</sup>	Steep slope approach with reduced landing distances	n/a
D-15	Introduction of towbarless towing	n/a

<sup>(\*)</sup> This Condition reference was initially referenced as B11, but corrected to avoid same references on different topics.

c) ATR42-500 '600 version'

All Special Conditions (SC) applicable to ATR 42-500 are also applicable to ATR 42-500 '600 version', plus the specific SC listed in the following table, as applicable to the Glass Cockpit perimeter (i.e. related to Mod 5948):

Condition Ref	Title	Supporting Ref
E-10	Fuel Quantity Indication System	n/a
F-18	HIRF Protection (ATR modification 5948)	n/a
F-35	Flight Recorder / Data Link recording	n/a
F-1018	HIRF Protection (ATR modification 6233 for Fuel Control Unit)	n/a

6. Exemptions

7. Deviations

a) ATR 42-200 / -300 / -320 models

None



**SECTION 1: ATR 42 Series - Continued**

## b) ATR 42-400 / -500 models

Deviation linked with ATR 42-500 optional modifications:

Condition Ref	Title	Supporting Ref
D-11	Mid Cabin door on VIP configuration aircraft	n/a

## 8. Equivalent Safety Findings

## a) ATR 42-200 / -300 / -320 models

Condition Ref	Title	Supporting Ref
JAR 25.865	Fire resistance of forward upper engine fitting	GATR/C 422.183/84 E2, dated 18 July 1985
JAR 25.807(c)	Number of passengers authorized in 'Combi' configuration	GATR/C 422.183/84 E2, dated 18 July 1985
JAR 25.807(d)	Emergency exits in the event of ditching for 'Combi' configurations	GATR/C 422.183/84 E2, dated 18 July 1985
D01	Reinforced security cockpit door	n/a
D-10	Improved flammability standards for thermal / acoustic Insulation materials used in Large Aeroplanes	n/a

## b) ATR 42-400 / -500 models

Condition Ref	Title	Supporting Ref
JAR 25.853(f)	Lavatory - "NO SMOKING" placard	DGAC-F letter 953117/SFACT/N.AT, dated 21 Jul 1995
JAR 25.811(e)(3)	Type III exits handle	DGAC-F letter 953117/SFACT/N.AT, dated 21 Jul 1995
B01	Stall and stall warning speeds and manoeuvre capability (1g stall speeds)	n/a
D01	Reinforced security cockpit door	n/a
D-10	Improved flammability standards for thermal / acoustic Insulation Materials used in Large Aeroplanes	n/a



**SECTION 1: ATR 42 Series - Continued**

Equivalent Safety Finding linked with ATR 42-500 optional modifications:

Condition Ref	Title	Supporting Ref
D-19	Bilingual EXIT signs for Japan	n/a
D-20	Trilingual EXIT signs Arabic / French / English	n/a

c) ATR 42-500 '600 version'

All Equivalent Safety Findings (ESF) applicable to ATR 42-500 are also applicable to ATR 42- 500 '600 version', plus the specific ESF listed in the following table, as applicable to the Glass Cockpit perimeter (i.e. related to ATR Modification 5948):

Condition Ref	Title	Supporting Ref
F-17	New harmonized CS 25.1329	n/a
F-25	Integrated Modular Avionics (IMA): Compliance with requirements for individual circuit protection	n/a

9. Environmental Protection

Noise: ICAO Annex 16, Volume I (see TCDSN EASA.A.84)

Fuel Venting and Emissions: ICAO Annex 16, Volume II

**III. Technical Characteristics and Operational Limitations**

1. Type Design Definition

The type definition is given in the ATR notes given in the table below:

	ATR 42-200/-300/-320	ATR 42-400	ATR 42-500
<b>Definition</b>	Note GATR/C n° 422.268/84	Note A/RT/C n° 425.0960/95	Note A/RT/C n° 425.0000/95

2. Description

The ATR 42 is a short range narrow fuselage twin turbo prop aircraft.

The ATR 42-200, -300, -320, -400, and -500 differ from each other from operating weights and/or powerplant (engine / propeller) configuration:

- The ATR 42-200 and ATR 42-300 models are physically identical and only differ in their maximum operating weights.
- The ATR 42-320 model is equipped with a different engine.
- The ATR 42-400 model is equipped with a different powerplant.



**SECTION 1: ATR 42 Series - Continued**

- The ATR 42-500 model is equipped with a different engine and differs from ATR 42-400 in its maximum operating weights.

**3. Equipment**

The pieces of equipment required by the Applicable Technical Requirements must be installed.

The pieces of equipment whose installation is approved are listed in the table below, as applicable according to the aircraft model.

	<b>ATR 42-200 / -300 / -320</b>	<b>ATR 42-400</b>	<b>ATR 42-500</b>
<b>Equipment list</b>	Note GATR/C n° 422.204/85	Note A/RT/C n° 425.1100/95	Note A/RT/C n° 425.0469/95

Cabin furnishing equipment complies with the following specifications (latest applicable issue):

	<b>ATR 42-200 / -300 / -320</b>	<b>ATR 42-400 / -500</b>
- Galleys	Technical Specification AEROSPATIALE n°419.464/82	Technical Specification ATR GIE n°419.098/90
- Passenger seats	Technical Specification AEROSPATIALE n°419.282/82	Technical Specification AEROSPATIALE n°419.282/82

**4. Dimensions**

Refer to relevant approved Airplane Flight Manual

**5. Engines**

<b>Aircraft model</b>	<b>Engine model</b>
ATR 42-200	2 PRATT and WHITNEY CANADA PW 120 (see Note 1)
ATR 42-300	2 PRATT and WHITNEY CANADA PW 120 (see Note 1)
ATR 42-320	2 PRATT and WHITNEY CANADA PW 121
ATR 42-400	2 PRATT and WHITNEY CANADA PW 121A
ATR 42-500	2 PRATT and WHITNEY CANADA PW 127M or PW 127E or PW 127F engines (after embodiment of Service Bulletin PW N° 21589 or N° 21667) (see Note 2)

Note 1: ATR Modification 1822 (SB ATR 42-72-0002) installs 1 or 2 PW 121 engines on ATR 42-200 / -300 but under PW 120 operating conditions

Note 2: Listed engine models are interchangeable and mixable with conditions (refer to relevant approved Airplane Flight Manual and approved MMEL). PW 127N engine is not eligible for ATR 42-500 model installation





**SECTION 1: ATR 42 Series - Continued****a) Engines limitations:**

Refer to EASA Type Certificate Data Sheet IM.E.041 and relevant approved Airplane Flight Manual for PW 120, 121, 121A, 127E, 127F, 127M engines limitations.

**b) Fuel limitations:**

Refer to relevant Engine Maintenance Manual chapter 72-00-00.

**c) Oil limitations:**

Refer to relevant Engine Maintenance Manual chapter 72-00-00.

**6. Auxiliary Power Unit**

Not Applicable

**7. Propellers****a) ATR 42-200 / -300 / -320 models**

2 HAMILTON SUNDSTRAND 14 SF-5 propellers

Limitations: Refer to FAA Type Data sheet P7NE or relevant approved Airplane Flight Manual.

**b) ATR 42-400 / -500 models**

2 HAMILTON SUNDSTRAND 568F-1 propellers

Limitations: Refer to FAA Type Data Sheet P8BO or relevant approved Airplane Flight Manual.

**8. Fluids (Fuel, Oil, Additives, Hydraulics)**

Hydraulics fluid for all ATR 42 models: AIRBUS/ATR standard NSA307110.

Refer to Airplane Flight Manual, Structural Repair Manual and Aircraft Maintenance Manual.

**9. Fluid Capacities**

<b>Unusable fuel</b>	<b>Usable fuel (kg)</b>		
	<b>Normal refuelling with pre selector</b>	<b>Refuelling up to high level indication</b>	
<b>(kg)</b>	<b>(kg)</b>	<b>(kg)</b>	<b>(litres)</b>
21.2	4 500	4 550	5 700

**10. Airspeed Limits**

Refer to relevant approved Airplane Flight Manual

**11. Flight Envelope**

**SECTION 1: ATR 42 Series - Continued**

Refer to relevant approved Airplane Flight Manual

**12. Operating Limitations****12.1 Approved Operations**

All ATR 42 aircraft models are certified in the Transport Category, for night and day operations when the appropriate equipment and instruments required by the airworthiness and operational regulations are approved, installed and operative, in the following conditions:

- instrument and visual flight
- flight in icing conditions

- Ditching

- ATR 42-200 / -300 / -320 models are certified for ditching.
  - ATR 42-500 model is certified for ditching when fitted with ATR Modification 4626.

When required by the operational rules, the life raft must be installed in accordance with the locations defined through ATR document ref A/RT/C 421.0178/96 rev. 2.

- Approaches

All ATR 42 aircraft models are certified for ILS CAT II precision approaches.

a) ATR 42-200 / -300 / -320 models

The list of modifications enabling ATR 42-200 / -300 and -320 models to be operated for CAT II approaches is defined by ATR Service Letter 42-22-5001, dated 28 October 1986. These modifications are as follows:

- Production aircraft:
  - 0030
  - 0801, when aircraft is equipped with Collins radio-navigation systems only
  - 0884, from aircraft MSN 040 and subsequent
  - 1046, up to aircraft MSN 039
  - 1078
  - 1175, only when CAT II approaches are performed with Flight Director
- In service aircraft (retrofit):
  - 0084
  - 0801, when aircraft is equipped with Collins radio-navigation systems only
  - 1046, up to aircraft MSN 039
  - 1078
  - 1112
  - 1175, only when CAT II approaches are performed with Flight Director



**SECTION 1: ATR 42 Series - Continued****b) ATR 42-400 / -500 models**

ATR 42-400 / -500 models can be operated for CAT II approaches when fitted with ATR Modification 1112.

**c) ATR 42-500 '600 version'**

ATR 42-500 '600 version' (i.e. fitted with Modification 5948) can be operated for CAT II approaches.

- Navigation (B-RNAV, P-RNAV, GNSS, ...)

All ATR 42 aircraft models are compliant with B-RNAV, P-RNAV, RNAV non precision approach, RNP approach, and GNSS as primary means of navigation specifications, providing that aircraft is equipped and operated in accordance with the relevant approved Airplane Flight Manual (AFM).

**12.2 Other Limitations**

Refer to relevant Airplane Flight Manual approved by EASA

**13. Maximum Certified Masses****a) ATR 42-200/-300/-320 models**

	<b>ATR 42-200</b>	<b>ATR 42-300 / -320</b>	<b>ATR 42-300 / -320 Mod 0951 or 8430</b>
	<b>(kg)</b>	<b>(kg)</b>	<b>(kg)</b>
MRW	15 770	16 170	16 720
MTOW	15 750	16 150	16 700
MLW	15 500	16 000	16 400
MZFW	14 500 / 15 200 <sup>(1)</sup>	14 800 / 15 200 <sup>(1)</sup>	15 200

	<b>ATR 42-300 / -320 Mods 4076<sup>(2)</sup></b>	<b>ATR 42-300 / -320 Mods 0951 + 1739 + 2082</b>	<b>ATR 42-300 / -320 Mods 8430 + 2082 + 1739</b>
	<b>(kg)</b>	<b>(kg)</b>	<b>(kg)</b>
MRW	17 070	16 720	16 720
MTOW	16 900	16 700	16 700
MLW	16 400	16 400	16 400
MZFW	15 540	15 540	15 540

<sup>(1)</sup> With the embodiment of ATR Modification 0863, the Maximum Zero Fuel Weight is increased to 15 200 kg.

<sup>(2)</sup> ATR Modification 4076 is only applicable if associated with ATR modification 1739 (a/c prior to MSN 70) or ATR Modification 1267 (other MSN).



**SECTION 1: ATR 42 Series - Continued**

## b) ATR 42-400 model

	<b>ATR 42-400 (kg)</b>
MRW	18 070
MTOW	17 900
MLW	17 600
MZFW	16 300

## c) ATR 42-500 model

	<b>ATR 42-500 (kg)</b>	<b>ATR 42-500 Mod 5175 (kg)</b>
MRW	18 770	18 770
MTOW	18 600	18 600
MLW	18 300	18 300
MZFW	16 700	17 000

## 14. Centre of Gravity Range

Refer to relevant approved Airplane Flight Manual

## 15. Datum

Refer to Weight and Balance Manual.

## 16. Mean Aerodynamic Chord (MAC)

Refer to Weight and Balance Manual.

## 17. Levelling Means

Refer to relevant approved Airplane Flight Manual

## 18. Minimum Flight Crew

For all ATR 42 aircraft models: Two (Pilot and Co-pilot) for all types of flight.

## 19. Minimum Cabin Crew

(in accordance with the emergency evacuation test)

<b>Installed Passenger Seats</b>	<b>Minimum Cabin Crew</b>
51 to 60	2
50 or fewer	1

Note: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC)



**SECTION 1: ATR 42 Series - Continued****20. Maximum Seating Capacity**

For the approved number of passengers for each aircraft, refer to the Cabin Layout Catalogue approved by the DGAC-F (ref. GATR/C 422.057/85).

- Full passenger configuration: 60

Note: The maximum number of passengers used for showing compliance with JAR 25.803(c) (emergency evacuation demonstration) was 66.

- COMBI configuration: 34.

Note: The COMBI configuration is achieved by embodiment of ATR Modification 0244 or 0755, respectively associated with embodiment of ATR Modification 1073. COMBI version is only certified for ATR 42-200 / -300 and -320 aircraft models.

**21. Baggage/ Cargo Compartment**

Refer to relevant Weight and Balance Manual.

**22. Wheels and Tyres****a) ATR 42-200 / -300 / -320 models**

	<b>Dimensions</b>
Main Landing Gear tyres	32x8.8R16
Nose Landing Gear tyres	450x190-5 Or 435x190 R5 (these two references are not mixable)

**b) ATR 42-400 / -500 models**

	<b>Dimensions</b>
Main Landing Gear tyres	32x8.8R16 12PR
Nose Landing Gear tyres	450x190-5 Or 435x190 R5 (these two references are not mixable)

**23. ETOPS**

The following table provides details on the ETOPS approvals for ATR 42 aircraft models:

<b>Model</b>	<b>Engine type</b>	<b>120 min approval date</b>
ATR 42-500	PW127E	19 November 2000
ATR 42-500	PW127M	21 December 2007



**SECTION 1: ATR 42 Series - Continued**

ATR 42-500 model is certified for 120 min ETOPS operations (supported by ATR Modification 4711) in compliance with the technical requirements of JAA Information Leaflet n° 20.

The type design, system reliability and performance of ATR 42-500 model is found capable for extended range operations when configured, maintained and operated in accordance with the current approved revision of the ETOPS Configuration, Maintenance and Procedures (CMP) document.

This paragraph does not constitute an approval to conduct extended range operations. Operational approval must be obtained from the Authority responsible for aircraft operations.

**IV. Operating and Service Instructions****1. Airplane Flight Manual (AFM)**

Refer to relevant approved Airplane Flight Manual

**2. Instructions for Continued Airworthiness and Airworthiness Limitations**

Refer to ATR AMM, SRM, IPC, CMM documents and the relevant approved "Time Limits" document

**3. Weight and Balance Manual (WBM)**

Refer to Weight and Balance Manual

**V. Operational Suitability Data (OSD)**

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate [TC number EASA.A.084] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

**1. Master Minimum Equipment List**

a) Master Minimum Equipment List (ATR 42 and ATR 72 Master Minimum Equipment List (MMEL) EDORA) approved at revision 00 dated December 2015, as per the defined Master Minimum Equipment List Operational Suitability Data Certification Basis: JAR MMEL / MEL, Amendment 1.

b) Required for entry into service by EU operator.

**2. Flight Crew Data**

a) The Flight Crew Data (OSD FC ATR 42/72 reference: EFOS-4267/15) approved at revision 1, dated 11 December 2015, as per the defined Flight Crew Operational Suitability Data Certification Basis: CS-FCD, Initial Issue.



**SECTION 1: ATR 42 Series - Continued**

b) Required for entry into service by EU operator.

c) Pilot Type Rating (refer following table) :

Manufacturer	Aircraft Model / Name	License Endorsement	Variants	Complex	SP/ SP HPA/ MP	OEB FC Report / OSD FC Report	Remarks
ATR	ATR 42 (Non PEC equipped) ATR 42 (PEC equipped) ATR 42 (glass cockpit)	ATR42/72	X	X	MP	X	OSD FC ATR 42/72 dated of issue Dec 11 <sup>th</sup> 2015
<p>PEC = Propeller Electronic Control</p> <p>Note: All ATR 42/72 series aircraft have been assessed as variants requiring familiarization / differences training as summarized in the MDR table (refer to ATR 42/72 OSD-FC report section 4).</p> <p><i>See EASA Explanatory Notes: EASA Type Rating &amp; License Endorsement Lists Flight Crew</i></p>							

### 3. Cabin Crew Data

- a) The Cabin Crew Data (ATR Operational Suitability Data (OSD) Report - CCD) approved at revision 1, dated 17 July 2015, as per the defined Cabin Crew Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.
- b) Required for entry into service by EU operator.
- c) The ATR42 aircraft models and the ATR72 aircraft models are determined to be variants amongst themselves.

Note: Information on minimum cabin crew number is not part of this CC OSD chapter, please refer to Section 1: ATR 42 series, Chapter III, Subchapter 19 of the TCDS



**SECTION 2: ATR 72 Series****I. General**

## 1. Type/ Model/ Variant

ATR 72-101, ATR 72-102,  
ATR 72-201, ATR 72-202, ATR 72-211, ATR 72-212, ATR 72-212A

## 2. Performance Class

A

## 3. Certifying Authority

Primary certification of above aircraft models has been granted by French DGAC under DGAC Type Certificate N° 176 and has been transferred to EASA since 28 September 2003 under EASA Type Certificate A.084.

## 4. Manufacturer

ATR - GIE Avions de Transport Régional  
1, Allée Pierre Nadot  
31712 Blagnac Cedex  
France

## 5. State of Design Authority Certification Application Date

ATR 72-101	: 19 December 1985
ATR 72-201	: 19 December 1985
ATR 72-102	: 19 December 1985
ATR 72-202	: 19 December 1985
ATR 72-211	: 24 August 1990
ATR 72-212	: 24 August 1990
ATR 72-212A <sup>(1)</sup>	: 15 February 1996

## 6. EASA Type Certification Application Date

ATR 72-212A '600 version'<sup>(2)</sup> : 18 December 2007

## 7. State of Design Authority Type Certificate Date

ATR 72-101	: 25 September 1989
ATR 72-201	: 25 September 1989
ATR 72-102	: 14 December 1989
ATR 72-202	: 14 December 1989
ATR 72-211	: 15 December 1992
ATR 72-212	: 15 December 1992
ATR 72-212A <sup>(1)</sup>	: 14 January 1997

(1) 'ATR 72-500' is the commercial designation of ATR 72-212A aircraft model. In particular, this designation is not recognised at EASA level as any certified aircraft model and this must not be used on ATR certified/approved documentation, where only ATR 72-212A must be indicated.





**SECTION 2: ATR 72 Series - Continued****8. EASA Type Certification Date**

ATR 72-212A '600 version'<sup>(2)</sup> : 10 August 2011

- (2) ATR 72-212A '600 version' is the designation to identify ATR 72-212A aircraft models having received the New Avionic Suite (NAS) modification, also named as 'Glass Cockpit', which represents the incorporation of ATR Significant Major Change n° 5948 and a batch of associated ATR (major & minor) modifications. ATR 72-212A '600 version' aircraft are not considered as new aircraft model or variant.

'ATR 72-600' is the commercial designation of the ATR 72-212A aircraft model fitted with NAS modification. This designation must not be used on ATR certified / approved documentation, and only mention of 'Mod 5948', 'ATR 72-212A with Mod 5948', 'ATR 72-212A fitted with NAS' or ATR 72-212A '600 version' must be indicated.

**II. Certification Basis****1. Reference Date for determining the applicable requirements**

Refer to section II.5

**2. State of Design Airworthiness Authority Type Certification Data Sheet No.**

Refer to section II.3

**3. State of Design Airworthiness Authority Certification Basis****a) ATR 72-101 / -201, -102 / -202, -211 / -212 models**

- JAR 25 change 11, including amendments 86/1, 87/1 and 88/1 for:
  - 25X20 (amendment 88/1)
  - 25.335 (amendment 88/1)
  - 25.345 (amendment 88/1)
  - 25.365 (amendment 86/1)
  - 25.571(e)(2), .905(d) and ACJ 25.905(d) (amendment 87/1)
  - 25.603 and ACJ 25.603 (amendment 86/1)
  - 25.812 (amendment 86/1)
  - 25.843 (amendment 86/1)
  - 25.853 (amendment 86/1)
- JAR P change 6, amended by Blue Paper C 795.
- JAR AWO Subpart 2 Change 1 and ACJ 231 and 236 for CAT II approaches.

The applicable technical requirements have been notified by DGAC-F letter 53590/SFACT/TC, dated 05 July 1989, and are referenced through ATR document, ref. GATR/C 0001/87.

**b) ATR 72-212A model**

- JAR 25 at change 14 for :



**SECTION 2: ATR 72 Series - Continued**

- 25X20 to 25X261
- 25.901 to 25.945
- JAR 25 at change 13 including amendments 90/1, 91/1 and 93/1 for :
  - NPA 25F-219 "Flight characteristics in icing conditions iss. 2" – 25.1419
  - NPA 25DF-179 "Operation without normal electrical power" - 25.1309(e) ,1351(d) (as published in O.P. 90/1)
  - NPA 25DF-191 "Miscellaneous requirements" - 25.819(b), .1309(b), .1351(b)(5)(c), .1353(c)(6)(d), .1355(c), .1357(d)(f revoked), .1359(d), .1362, .1363(a), .1431(d). (as published in O.P. 90/1)
  - NPA 25D-181 "Resistance to fire terminology" - 25.853(e) , .863(b)(4), .867(a). (as published in O.P. 91/1)
  - NPA 25D-206 "Emergency exit marking" - 25.811(e)(4) (as published in O.P.91/1)
  - NPA 25D-227 "Compartment interior" - 25.853(f) (as published in O.P. 93/1)
- JAR 25 at change 11, including amendments 86/1, 87/1 and 88/1 for:
  - 25.335 (Amendment 88/1)
  - 25.345 (Amendment 88/1)
  - 25.365 (Amendment 86/1)
  - 25.571(e)(2) (Amendment 87/1)
  - 25.603 (Amendment 86/1)
  - 25.812 (Amendment 86/1)
  - 25.843 (Amendment 86/1)
  - 25.853 (Amendment 86/1)
- JAR 25 at change 11 except for 25X20 to 25X261 and 25.901 to 25.945.
- JAR AWO Subpart 2 Change 1 for CAT II approaches.

On an Elect to Comply basis:

- JAR 25 at change 15 including amendment 96/1 for :
  - 25.201
  - 25.203

The applicable technical requirements for ATR 72-212A model are referenced through ATR 72-212A document CRI A-01 issue 5.

#### 4. EASA Airworthiness Requirements ATR 72-212A "600 version"

For areas outside of Glass Cockpit perimeter, ATR 72-212A Certification requirements (as identified in paragraph II.1.b) apply.



**SECTION 2: ATR 72 Series - Continued**

For areas within Glass Cockpit perimeter (i.e. related to ATR Modification 5948), requirements here below listed have to be considered accordingly:

- CS 25 amendment 3, except for 25.301 to 25.307, .365, .395(b), .561, .571, .601 to .613, .619, and .625:

**Subpart B**

- 25.255(a)(2)

**Subpart C**

- 25.581

**Subpart D**

- 25.671(b)(c)
- 25.672(a)
- 25.677(b)
- 25.679(a)(2)
- 25.685
- 25.699(a)(b)
- 25.703
- 25.729(e)(f)(3)
- 25.735(d)
- 25.771(a)(c)(e)
- 25.773(a)
- 25.777(f)
- 25.783(e)
- 25.841(b)(5)(b)(6)(b)(8)
- 25.843(b)(3)
- 25.853(a)(d)(e)
- 25.854(a)
- 25.855(h)
- 25.857(b)(3)
- 25.869(a)
- 25.899

**Subpart E**

- 25.1141(f)
- 25.1165(g)
- 25.1203(a)(b)(2)(b)(3)

**Subpart F**

- 25.1301 to 25.1305
- 25.1307(c)(d)(e)
- 25.1309
- 25.1316
- 25.1321 to 25.1323
- 25.1325(a)(d)(e)(f)
- 25.1326(a)
- 25.1327



**SECTION 2: ATR 72 Series - Continued**

- 25.1331
- 25.1333
- 25.1337
- 25.1351(a)(b)(6)(c)(d)
- 25.1353 (a)(b)(c)(6)(d)(e)
- 25.1355 to 25.1360
- 25.1381
- 25.1419(c )
- 25.1431
- 25.1435(b)(1)
- 25.1459

**Subpart G**

- 25.1501
- 25.1523 to 25.1529
- 25.1541 to 25.1549
- 25.1555
- 25.1563 to 25.1587

As per Reversion on Certification basis:

- JAR 25 change 13 for :
  - 25.301 to 25.307
  - 25.365
  - 25.395(b)
  - 25.561
  - 25.571
  - 25.601 to 25.613
  - 25.619
  - 25.625
- CS-AWO Subpart 2 for CAT II approaches

The applicable technical requirements for ATR 72-212A “600 version” are referenced through ATR 72-212A CRI A-1001 issue 4.



**SECTION 2: ATR 72 Series - Continued**

## 5. Special Conditions

## a) ATR 72-101/-201, -102/-202, -211/-212 models

Condition Ref	Title	Supporting Ref
O1	Demonstration of endurance	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
B5	Stick pusher	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
B7	1g Stall Speed	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
D7	Lightning protection indirect effects	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
D-16	Heat Release and Smoke Density - Requirements to seat materials	n/a
F2	low altitude automatic pilot engagement after take-off	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
F3	Effect of external radiations upon aircraft system	DGAC-F letter 53590/SFACT/TC, dated 5 Jul 1989
XX	Propeller: full composite blades <b>only for ATR 72-211/-212 models</b>	n/a
H-1	Instructions for continued Airworthiness for EWIS	n/a

Special Conditions linked with ATR 72-101 / -201 / -102 / -202 / -211 and -212 optional modifications:

Condition Ref	Title	Supporting Ref
B9	Steep approach capability	DGAC-F letter 954144/SFACT/N.AT, dated 19 Oct 1995
B11	Operations on narrow runways	DGAC-F letter 961413/SFACT/N.AT, dated 22 Mar 1996
C01	Operations on unpaved runways	n/a
D-15	Introduction of towbarless towing	n/a



**SECTION 2: ATR 72 Series - Continued**

## b) ATR 72-212A model

Condition Ref	Title	Supporting Ref
O1	Demonstration of endurance	n/a
B5	Stick pusher	n/a
B7	Stall and stall warning speeds and manoeuvre capability	n/a
B10	Clever stall warning / Stick Pusher	n/a
D7	Lightning protection indirect effects	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
D-16	Heat Release and Smoke Density - Requirements to seat materials	n/a
F2	Low altitude automatic pilot engagement after Take-Off	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
F3	Effect of external radiations upon aircraft systems	DGAC-F letter 953202/SFACT/N.AT, dated 27 Jul 1995
H-1	Instructions for continued Airworthiness for EWIS	n/a

Special Conditions linked with ATR 72-212A optional modifications:

Special Condition	Title	Supporting Ref
B9	Steep approach capability	DGAC-F letter 954144/SFACT/N.AT, dated 19 Oct 1995
B11	Operations on narrow runways	DGAC-F letter 961413/SFACT/N.AT, dated 22 Mar 1996
C01	Operations on unpaved runways	n/a
D-15	Introduction of towbarless towing	n/a

## a) ATR 72-212A '600 version'

All Special Conditions (SC) applicable to ATR 72-212A are also applicable to ATR 72-212A '600 version', plus the specific SC listed in the following table, as applicable to the Glass Cockpit perimeter (i.e. related to ATR Modification 5948) :



**SECTION 2: ATR 72 Series - Continued**

<b>Special Condition</b>	<b>Title</b>	<b>Supporting Ref</b>
E-10	Fuel Quantity Indication System	n/a
F-18	HIRF Protection	n/a
F-35	Flight Recorder/data link recording	n/a
F-1018	HIRF Protection (ATR modification 5977 for Fuel Control Unit installation)	n/a

**6. Exemptions**

None

**7. Deviations**

a) ATR 72-101/-201, -102/-202, -211/-212 models

None

b) ATR 72-212A model

Deviation linked with ATR 72-212A optional modifications:

<b>Condition Ref</b>	<b>Title</b>	<b>Supporting Ref</b>
D-12	Mid Cabin door on VIP configuration aircraft	n/a
D-13	Firm Handhold	n/a
D-14	Heat release and Smoke density	n/a



**SECTION 2: ATR 72 Series - Continued****8. Equivalent Safety Findings****a) ATR 72-101/-201, -102/-202, -211/-212 models**

Condition Ref	Title	Supporting Ref
JAR 25.785(h) <sup>(1)</sup>	Flight attendant seat installed between the type III exits	n/a
D01	Reinforced security cockpit door	n/a
D-10	Improved flammability standards for thermal / acoustic Insulation materials used in Large Aeroplanes	n/a

<sup>(1)</sup> This ESF is only applicable to ATR 72-102 /-202 /-212 aircraft models

**b) ATR 72-212A model**

Safety equivalences agreed for ATR 42-500 have been issued for ATR 72-212A model.

Condition Ref	Title	Supporting Ref
JAR 25.785(h)	Flight attendant seat installed between the type III exits	n/a
JAR 25.853(f)	Lavatory - "NO SMOKING" placard	DGAC-F letter 953117/SFACT/N.AT, dated 21 Jul 1995
JAR 25.811(e)(3)	Type III exits handle	DGAC-F letter 953117/SFACT/N.AT, dated 21 Jul 1995
B01	Stall and stall warning speeds and manoeuvre capability (1g stall speeds)	n/a
D01	Reinforced security cockpit door	n/a
D-10	Improved flammability standards for thermal / acoustic Insulation materials used in Large Aeroplanes	n/a

Equivalent Safety Finding linked with ATR 72-212A optional modifications:

Condition Ref	Title	Supporting Ref
D-19	Bilingual EXIT signs for Japan	n/a
D-20	Trilingual EXIT signs Arabic / French / English	n/a

**c) ATR 72-212A '600 version'**

All Equivalent Safety Findings (ESF) applicable to ATR 72-212A are also applicable to ATR 72-212A '600 version', plus the specific ESF listed in the following table, as applicable to the Glass Cockpit perimeter (i.e. related to ATR Modification 5948) :





**SECTION 2: ATR 72 Series - Continued**

Condition Ref	Title	Supporting Ref
F-17	New harmonized CS 25.1329	n/a
F-25	Integrated Modular Avionics (IMA): Compliance with requirements for individual circuit protection	n/a

## 9. Environmental Protection

Noise: ICAO Annex 16, Volume I (see TCDSN EASA.A.84)

Fuel Venting and Emissions: ICAO Annex 16, Volume II

**III. Technical Characteristics and Operational Limitations**

## 1. Type Design Definition

The type definition is given in the ATR notes given in the table below:

	<b>ATR 72-101 and -201</b>	<b>ATR 72-211</b>
Definition	Note GATR/C n° 425.795/89	Note GATR/C n° 425.718/92
	<b>ATR 72-102 and -202</b>	<b>ATR 72-212</b>
Definition	Note GATR/C n° 422.130/89	Note GATR/C n° 425.719/92
	<b>ATR 72-212 A</b>	
Definition	Note A/RT/C n° 425.0779/96	

## 2. Description

The ATR 72 is a short range narrow fuselage twin turbo prop aircraft.

The ATR 72-101 and ATR 72-201 models are physically identical and only differ in their maximum operating weights.

The ATR 72-102 and ATR 72-202 models are physically identical and only differ in their maximum operating weights.

The ATR 72-211 and ATR 72-212 models have a different powerplant than the one mounted on ATR 72-101/-102/-201/-202 models.

The differences existing between respectively ATR 72-101 and ATR 72-102 models, ATR 72-201 and ATR 72-202 models, and ATR 72-211 and ATR 72-212 models, are limited to the type of doors, emergency exits and their distribution.

The ATR 72-212A model is equipped with specific propellers and can have different engines than the ones fitted on ATR 72-211 / -212 models.

## 3. Equipment

The pieces of equipment required by the Applicable Technical Conditions must be installed. The pieces of equipment whose installation is approved are listed in the definition of the reference models and of the modifications which are applicable to these models.



**SECTION 2: ATR 72 Series - Continued**

	<b>ATR 72-101 and -201</b>	<b>ATR 72-211</b>
Equipment list	Note GATR/C n° 425.892/89	Note GATR/C n° 425.182/92

	<b>ATR 72-102 and -202</b>	<b>ATR 72-212</b>
Equipment list	Note GATR/C n° 422.102/89	Note GATR/C n° 425.676/92

	<b>ATR 72-212 A</b>
Equipment list	Note A/RT/C n° 425.0790/96

Cabin furnishing equipment must comply with the following specifications (latest applicable issue):

	<b>ATR 72-101 / -201 / -102 / -202 / -211 / -212</b>	<b>ATR 72-212A</b>
- Galleys	Technical Specification AEROSPATIALE n°419.464/82	Technical Specification ATR GIE n°419.098/90
- Passenger seats	Technical Specification AEROSPATIALE n°419.282/82	Technical Specification AEROSPATIALE n°419.282/82

## 4. Dimensions

Refer to relevant approved Airplane Flight Manual.

## 5. Engines

<b>Aircraft model</b>	<b>Engine model</b>
ATR 72-101 and -201	2 PRATT and WHITNEY CANADA PW 124B
ATR 72-102 and -202	2 PRATT and WHITNEY CANADA PW 124B
ATR 72-211 and -212	2 PRATT and WHITNEY CANADA PW 127 or PW127F after embodiment of Service Bulletin PW N°21591 (ATR Modification 8233)
ATR 72-212A	2 PRATT and WHITNEY CANADA PW 127M or PW 127F (see note)
ATR 72-212A post mod 7079	2 PRATT and WHITNEY CANADA PW 127N or PW 127M or PW 127F (see note)

Note: Listed engine models are interchangeable and mixable with conditions (refer to relevant approved Airplane Flight Manual and approved MMEL).

## a) Engines limitations:



**SECTION 2: ATR 72 Series - Continued**

Refer to EASA Type Certificate Data Sheet IM.E.041 and relevant approved Airplane Flight Manual for PW 124 B, 127, 127F, 127M, 127N engines limitations

b) Fuel limitations :

Refer to relevant Engine Maintenance Manual chapter 72-00-00.

c) Oil limitations :

Refer to relevant Engine Maintenance Manual chapter 72-00-00.

6. Auxiliary Power Unit  
Not Applicable

7. Propellers

a) Models ATR 72-101/-201, -102/-202

- 2 HAMILTON SUNDSTRAND 14 SF-11 propellers
- or
- 2 HAMILTON SUNDSTRAND 14 SF-11 E propellers

Limitations: Refer to FAA Type Data Sheet P7NE, or relevant approved Airplane Flight Manual

b) Models ATR72-211 and 212

- 2 HAMILTON SUNDSTRAND 247 F-1 propellers
- or
- 2 HAMILTON SUNDSTRAND 247 F-1E propellers

Limitations: Refer to FAA Type Data Sheet P1BO, or relevant approved Airplane Flight Manual

c) Models ATR 72-211/-212 fitted with modification 3560

- 2 HAMILTON SUNDSTRAND 14 SFL-11 propellers  
(same characteristics as 14 SF-11).

Limitations: Refer to FAA Type Data Sheet P7NE, or relevant approved Airplane Flight Manual

d) Model ATR72-212A

- 2 HAMILTON SUNDSTRAND 568F-1 propellers

Limitations: Refer to FAA Type Data Sheet P8BO, or relevant approved Airplane Flight Manual

8. Fluids (Fuel, Oil, Additives, Hydraulics)



**SECTION 2: ATR 72 Series - Continued**

Hydraulics fluid for all ATR 72 models: AIRBUS/ATR standard NSA307110.  
Refer to Airplane Flight Manual, Structural Repair Manual and Aircraft Maintenance Manual.

**9. Fluid Capacities**

<b>Unusable fuel</b>	<b>Usable fuel (kg)</b>		
	<b>Normal refuelling with pre selector</b>	<b>Refuelling up to high level indication</b>	
<b>(kg)</b>	<b>(kg)</b>	<b>(kg)</b>	<b>(litres)</b>
30	5 000	5 050	6 360

**10. Airspeed Limits**

Refer to relevant approved Airplane Flight Manual

**11. Flight Envelope**

Refer to relevant approved Airplane Flight Manual.

**12. Operating Limitations****12.1 Approved Operations**

All ATR 72 aircraft models are certificated in the Transport Category, for night and day operations when the appropriate equipment and instruments required by the airworthiness and operational regulations are approved, installed and operative, in the following conditions:

- instrument and visual flight
- flight in icing conditions

- Ditching

The ATR 72 models are certified for ditching.

When requested by the operational rules the life rafts must be installed in accordance with the locations defined in document GATR/C 421.054/92 issue 5.

- Approaches

All ATR 72 aircraft models are certified for ILS CAT II precision approaches.

All ATR 72 can be operated for CAT II approaches when fitted with ATR Modification 1112.

ATR 72-212A '600 version' (i.e. fitted with Modification 5948) can be operated for CAT II approaches.

- Navigation (B-RNAV, P-RNAV, GNSS, ...)



**SECTION 2: ATR 72 Series - Continued**

All ATR 72 aircraft models are compliant with B-RNAV, P-RNAV, RNAV non precision approach, RNP approach, and GNSS as primary means of navigation specifications, providing that aircraft is equipped and operated in accordance with the relevant approved Airplane Flight Manual (AFM).

**12.2 Other Limitations**

Refer to relevant Airplane Flight Manual approved by the EASA.

**13. Maximum Certified Masses****a) ATR 72-101 / -201, -102 / -202, -211 / -212 models**

	<b>ATR 72-101 / -102 (kg)</b>	<b>ATR 72-201 / -202 / -211 / -212 (kg)</b>	<b>ATR 72-201 / -202 Mods 2055 + 3651 (kg)</b>	<b>ATR 72-211 / -212 <sup>(2)</sup> Mods 2055 + 3651 (kg)</b>
<b>MRW</b>	20 020	21 530	22 030	22 030
<b>MTOW</b>	19 990	21 500	22 000	22 000
<b>MLW</b>	19 900	21 350	21 350	21 350
<b>MZFW</b>	19 350	19 700 / 20 000 <sup>(1)</sup>	19 700 / 20 000 <sup>(1)</sup>	19 700 / 20 000 <sup>(1)</sup>

<sup>(1)</sup> With the embodiment of ATR Modification 3849, the Maximum Zero Fuel Weight is increased to 20 000 kg.

<sup>(2)</sup> With the embodiment of ATR Modifications 2055 and 3651, ATR 72-211 and -212 aircraft models must be equipped with HAMILTON SUNDSTRAND 247F-1 propellers.

**b) ATR 72-212A models**

	<b>ATR 72-212A 'Basic' (kg)</b>	<b>ATR 72-212A Mod 4671 (kg)</b>	<b>ATR 72-212A Mod 5213 (kg)</b>	<b>ATR 72-212A Mod 5555 (kg)</b>	<b>ATR 72-212A Mod 6219 (kg)</b>
<b>MRW</b>	22 180	22 670	22 670	22 970	23 170
<b>MTOW</b>	22 000	22 500	22 500	22 800	23 000
<b>MLW</b>	21 850	22 350	22 350	22 350	22 350
<b>MZFW</b>	20 000	20 300	20 500	20 800	21 000

	<b>ATR 72-212A Mod 7214 (kg)</b>
<b>MRW</b>	22170
<b>MTOW</b>	21999
<b>MLW</b>	21850
<b>MZFW</b>	20500



**SECTION 2: ATR 72 Series - Continued****Operational Weight Variants (WV):**

On ATR 72-212A aircraft model fitted with ATR Modification 6852, Operational Weight Variants (WV) have been defined as follows:

	Operational Weight Variant (WV)						
	WV00	WV09	WV10	WV20	WV30	WV40	WV50
<b>MRW</b>	21 170	22170	22 180	22 670	22 670	22 970	23 170
<b>MTOW</b>	21 000	21999	22 000	22 500	22 500	22 800	23 000
<b>MLW</b>	21 000	21850	21 850	22 350	22 350	22 350	22 350
<b>MZFW</b>	20 000	20500	20 000	20 300	20 500	20 800	21 000

Depending on the embodiment of ATR Modification 4671, 5213, 5555 or 6219, with or without ATR Modification 7214 associated, ATR 72-212A aircraft model, fitted with ATR Modification 6852, can be operated as identified in the table below:

ATR Mod	Operational Weight Variant (WV)						
	WV00	WV09	WV10	WV20	WV30	WV40	WV50
<b>'Basic'</b>	✓		✓				
<b>4671</b>	✓		✓	✓			
<b>5213</b>	✓		✓	✓	✓		
<b>5555</b>	✓		✓	✓	✓	✓	
<b>6219</b>	✓		✓	✓	✓	✓	✓
<b>7214 + 5213</b>	✓	✓	✓	✓	✓		
<b>7214 + 5555</b>	✓	✓	✓	✓	✓	✓	
<b>7214 + 6219</b>	✓	✓	✓	✓	✓	✓	✓

## 14. Centre of Gravity Range

Refer to relevant approved Aircraft Flight Manual.

## 15. Datum

Refer to Weight and Balance Manual

## 16. Mean Aerodynamic Chord (MAC)

Refer to relevant Weight and Balance Manual.

## 17. Levelling Means

Refer to relevant approved Airplane Flight Manual.

## 18. Minimum Flight Crew

For all ATR 72 aircraft models: Two (Pilot and Co-pilot) for all types of flight.



**SECTION 2: ATR 72 Series - Continued****19. Minimum Cabin Crew**

(in accordance with the emergency evacuation test)

Installed Passenger Seats	Minimum Cabin Crew
51 to 78	2
50 or fewer	1

Note: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC).

**20. Maximum Seating Capacity**

- Full passenger configuration: 74

Note: The maximum number of passengers used for showing compliance with JAR 25.803(c) (emergency evacuation demonstration) was 74

- Full passenger configuration for aircraft fitted with ATR Modification 7289: 78

Note: The 78 pax cabin configuration is achieved by embodiment of ATR Modification 7289, respectively associated with embodiment of ATR Modifications 6219, 6517, 6666, and 7497. The 78 pax cabin configuration is only certified for ATR 72-212A aircraft model.

**21. Baggage/ Cargo Compartment**

Refer to relevant Weight and Balance Manual.

**22. Wheels and Tyres**

For All ATR 72 models

	Dimensions
Main Landing Gear tyres	H 34 x 10.0 R16
Nose Landing Gear tyres	450x190-5 Or 453X190R5 (these two references are not mixable)

**23. ETOPS**

The following table provides details on the ETOPS approvals for ATR 72 series.

Model	Engine type	120 min approval date
ATR 72-101 / -102	PW124B	13 February 1995



**SECTION 2: ATR 72 Series - Continued**

ATR 72-201 / -202	PW124B	13 February 1995
ATR72-212A	PW127F	29 November 2000
ATR72-212A	PW127M	21 December 2007
ATR72-212A	PW127N	06 June 2014

ATR 72-101 / -201 and -102 / -202 models are certified for 120 min ETOPS operations according to Condition Technique Complémentaire (CTC) 20 ETOPS and in compliance with the technical requirements of AC 20-142A, issue dated December 30<sup>th</sup>, 1988.

ATR 72-212A model is certified for 120 min ETOPS operations (supported by ATR Modification 4711) in compliance with the technical requirements of JAA Information Leaflet n° 20.

The type design, system reliability and performance of ATR model(s) were found capable for extended range operations when configured, maintained and operated in accordance with the current revision of the ETOPS Configuration, Maintenance and Procedures (CMP) document applicable to each model.

This paragraph does not constitute an approval to conduct extended range operations. Operational approval must be obtained from the Authority responsible for aircraft operations.

**IV. Operating and Service Instructions**

## 1. Airplane Flight Manual (AFM)

Refer to relevant approved Airplane Flight Manual

## 2. Instructions for Continued Airworthiness and Airworthiness Limitations

Refer to ATR AMM, SRM, IPC, CMM documents and the relevant approved "Time Limits" document

## 3. Weight and Balance Manual (WBM)

Refer to Weight and Balance Manual

**V. Operational Suitability Data (OSD)**

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate [TC number EASA.A.084] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

## 1. Master Minimum Equipment List

- a) Master Minimum Equipment List (ATR 42 and ATR 72 Master Minimum Equipment List (MMEL) EDORA) approved at revision 00 dated December 2015, as per the defined Master Minimum Equipment List Operational Suitability Data Certification Basis: JAR MMEL / MEL, Amendment 1.





**SECTION 2: ATR 72 Series - Continued**

- b) Required for entry into service by EU operator.

**2. Flight Crew Data**

- a) The Flight Crew Data (OSD FC ATR 42/72 reference: EFOS-4267/15) approved at revision 1, dated 11 December 2015, as per the defined Flight Crew Operational Suitability Data Certification Basis: CS-FCD, Initial Issue.

- b) Required for entry into service by EU operator.

- c) Pilot Type Rating (refer following table) :

Manufacturer	Aircraft Model / Name	License Endorsement	Variants	Complex	SP/ SP HPA/ MP	OEB FC Report / OSD FC Report	Remarks
ATR	ATR 72 (Non PEC equipped) ATR 72 (PEC equipped) ATR 72 (glass cockpit)	ATR42/72	X	X	MP	X	OSD FC ATR 42/72 dated of issue Dec 11 <sup>th</sup> 2015
<p>PEC = Propeller Electronic Control</p> <p>Note: All ATR 42/72 series aircraft have been assessed as variants requiring familiarization / differences training as summarized in the MDR table (refer to ATR 42/72 OSD-FC report section 4).</p> <p><i>See EASA Explanatory Notes: EASA Type Rating &amp; License Endorsement Lists Flight Crew</i></p>							

**3. Cabin Crew Data**

- a) The Cabin Crew Data (ATR Operational Suitability Data (OSD) Report - CCD) approved at revision 1, dated 17 July 2015, as per the defined Cabin Crew Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.

- b) Required for entry into service by EU operator.

- c) The ATR72 aircraft models and the ATR42 aircraft models are determined to be variants amongst themselves.

Note: Information on minimum cabin crew number is not part of this CC OSD chapter, please refer to Section 2: ATR 72 series, Chapter III, Subchapter 19 of the TCDS



**SECTION 2: ATR 72 Series - Continued****VI. Notes****1. Design conditions**

On August 18<sup>th</sup>, 2004, Design Organisation Approval n° EASA.21J.044 has been granted by EASA to ATR - GIE Avions de Transport Régional.

**2. Production conditions**

On December 2<sup>nd</sup>, 1985, aeronautical products manufacturer was named AEROSPATIALE: Manufacturer identification aircraft plate is AEROSPATIALE-AERITALIA

On March 12<sup>th</sup>, 1991, Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On September 21<sup>st</sup>, 1992, production agreement for aeronautical products manufacturer n° P06 granted by DGAC to AEROSPATIALE DIVISION AVIONS. Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On January 1<sup>st</sup>, 1995, AEROSPATIALE DIVISION AVIONS was renamed AEROSPATIALE BRANCHE AERONAUTIQUE. Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On December 21<sup>st</sup>, 1997, Production Organization Approval (POA) N° FG.004, granted by DGAC to AEROSPATIALE BRANCHE AERONAUTIQUE. Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On July 1<sup>st</sup>, 1998, AEROSPATIALE BRANCHE AERONAUTIQUE was renamed AEROSPATIALE SECTEUR AERONAUTIQUE. Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On April 1<sup>st</sup>, 1999, creation of AEROSPATIALE ATR, after separation from AEROSPATIALE SECTEUR AERONAUTIQUE activities, and Production Organization Approval (POA) N° FG054 granted to AEROSPATIALE ATR. Manufacturer identification on aircraft plate is AEROSPATIALE-ALENIA.

On June 12<sup>th</sup>, 1999, AEROSPATIALE ATR was renamed AEROSPATIALE MATRA ATR. Manufacturer identification on aircraft plate is AEROSPATIALE MATRA ATR - ALENIA.

On September 28<sup>th</sup>, 2000, AEROSPATIALE MATRA ATR was renamed EADS ATR. Manufacturer identification on aircraft plate is EADS ATR -ALENIA.

On June 1<sup>st</sup>, 2001, the POA N° FG054 has been transferred from EADS ATR to ATR - GIE Avions de Transport Régional. Manufacturer identification on aircraft plate is ATR.

On June 10<sup>th</sup>, 2004, Production Organization Approval (POA) according to Part 21, section A, subpart G, referenced FR.21G.0054 granted by DGAC France to ATR - GIE Avions de Transport Régional. Manufacturer identification on aircraft plate is ATR.



## **SECTION 2: ATR 72 Series - Continued**

Note: The address of ATR [ATR Blagnac 31712 France EUROP (FB429)] appears on the aircraft identification plate from June 1<sup>st</sup> 2001



**SECTION: ADMINISTRATIVE****I. Acronyms and Abbreviations**

AMM	Aircraft Maintenance Manual
AWO	All Weather Operations
CC	Cabin Crew
CMM	Component Maintenance Manual
CRI	Certification Review Item
CS	Certification Specifications
DOA	Design Organisation Approval
EASA	European Aviation Safety Agency
ESF	Equivalent Safety Finding
ETOPS	Extended-range Twin-engine Operational Performance Standards
EWIS	Enhanced Wiring Interconnection System
FC	Flight Crew
ICA	Instructions for Continued Airworthiness
ICAO	International Civil Aviation Organization
IPC	Illustrated Part Catalogue
JAR	Joint Aviation Requirements
MMEL	Master Minimum Equipment List
MRW	Maximum Ramp Weight
MTOW	Maximum Take-Off Weight
MLW	Maximum Landing Weight
MZFW	Maximum Zero Fuel Weight
OSD	Operational Suitability Data
POA	Production Organisation Approval
SRM	Structural Repair Manual
TCDS	Type Certificate Data Sheet
WV	Weight Variant

**II. Type Certificate Holder Record**

ATR - GIE Avions de Transport Régional  
 1, Allée Pierre Nadot  
 31712 Blagnac Cedex  
 France

**III. Change Record**

Issue	Date	Changes	TC issue
Issue 01	28/04/2006	Initial Issue	Initial Issue, 28/04/2006
Issue 02	21/12/2007	Update: Introduce SC H-1 'EWIS ICA'.	Initial Issue, 28/04/2006



Issue 03	17/10/2012	Update: Introduce ATR '600 Version'; Introduction OW Variants for ATR 72-212A.	Initial Issue, 28/04/2006
Issue 04	04/07/2014	Update: Add Special Condition C02; Remove Special Condition B12 (cancelled); Rename duplicate Special Condition B11; Introduce new Engine PW 127N on ATR 72-212A; Correct references to ATR and DGAC documents.	Initial Issue, 28/04/2006
Issue 05	18/12/2015	Update Introduce OSD Introduce Minimum Cabin Crew Number Typographical corrections Add Special Condition / ESF / Deviation Add OWV 09	Initial Issue, 28/04/2006
Issue 06	20/07/2017	Update: Typographical corrections: Special Condition table of ATR72-212A has been restored (as at issue 04); CRI F-1018 added in 'Special Conditions' for ATR72-212A '600 version' and ATR42-500 '600 version'; Delete the Mod 6404 in ATR72-212A "Maximum certified mass"	Initial Issue, 28/04/2006
Issue 07	18/12/2017	Clarified the Certification Bases for OSD constituents for Flight Crew Data, Cabin Crew Data and Master Minimum Equipment List. Editorial correction adding SC C01 for ATR 42-500	Initial Issue, 28/04/2006

-END-

