UNITED KINGDOM
CIVIL AVIATION AUTHORITY

FA47
Issue 3
September 2000
ATR 42 300 Series
500 Series

ATR 72 100 Series
200 Series

TYPE CERTIFICATE DATA SHEET No. FA47

This data sheet which is part of CAA Type Certificate No. FA47 prescribes conditions and limitations under which the product, for which the type certificate was issued, meets the airworthiness requirements of the Civil Aviation Authority. UK Certification is based on the DGAC Certification as indicated in Data Sheet No. 176

TYPE CERTIFICATE HOLDER:

Aerospatiale and Alenia
316 Route de Bayonne
31056 Toulouse Cedex 03
France

Alenia
Viale d'elle Aeronautica 80038
Pomigliano D'Arco
Naples, Italy

MANUFACTURER:

Aerospatiale and Alenia
316 Route de Bayonne
31056 Toulouse Cedex 03
France

Alenia
Viale d'elle Aeronautica 80038
Pomigliano D'Arco
Naples, Italy

AIRCRAFT TYPE/ MODEL NUMBER(S):

ATR 42 300, -320, -500
ATR 72 101, -201 ,-202, -211, -212

TYPE DESIGN DEFINITION:

ATR42-300 Model:
ATR document ref A/RT/C 422.355/86

ATR42-320 Model:
ATR document ref A/RT/C 422.355/86, Issue 18

ATR43-500:
ATR document ref A/RT/C 425.0001/25, Issue 2

ATR72-101,-202
ATR document ref A/RT/C 425.041/91, Issue 3

ATR72-102,-202
ATR document ref A/RT/C 425.042/91, Issue 7

ATR72,-211,-212
ATR document ref A/RT/C 425.0804/95 Issue 1

CERTIFICATION BASIS: ATR 42-300 Series

UK certification of the Type Design is on the basis of compliance with the Certification Basis of the Certificating State and the UK Additional Requirements for Import for the type.

1. <u>Requirements of Certificating State</u>

(a)	**DGAC Basic Requirements**	**CAA Corresponding Requirements**
	JAR 25 Change 8	Same except for UK National Variants [see also (2) below]
	JAR 25 Amendment 81/2	JAR 25 Amendment 81/2
	JAR AWO Change 1	JAR AWO Change 1

(b)	**DGAC Special Conditions: ATR 42-300**	**CAA Corresponding Requirements**
	B1 Take off Path	JAR 25.111(c) (4) in Change 11
	B2 High Speed Characteristics	JAR 25.253 (a) (2) (iii) and 25 BB.253 (a) (2) (iii) in Change 10.
	B3 Landing Climb-All Engines	JAR 25.119 in Change 10
	B4 Static Lateral Stability	JAR 25.177(b) in Change 10
	B5 Stick Pusher	JAR NPA 25B-154, 5 June 1985
	BB1 ATPCS	JAR Flight Working Paper 192 Issue 9 April 1985
	C1 and C2 Cancelled	
	C3 Pressurised Cabin Loads	JAR 25.365 (e) in Change 10
	C4 Damage Tolerance	JAR 25.571(a)(3) in Change 10
	C5 Design Airspeed	JAR NPA 25 C171 April 1985
	C6 High Lift Devices	JAR NPA 25 C171 April 1985
	C7 Propeller Debris	JAR NPA 25 C112 August 1985
	D1 Doors	JAR 25/783(b) and (e) to (j) in Change 10
	D2 Fire Extinguisher	JAR 25.851(a)(5) and (a) (6) in Change 10
	D3 Cargo Fire Detection	JAR 25.858 in Change 10
	D4 Cabin Pressure Tests	JAR 25.843(a) in amendment 86/1
	E1 Propellers	JAR 25.905(c) and 25.1305(d)(1) in Change 10
	F1 Misc. Equipment	JAR 25.1307(h) in Change 10
	G1 Instructions for Continued Airworthiness	JAR 25.1529 in Change 10
	O1 Operation Demonstration of Endurance	No additional flying required (covered by existing endurance demonstration flying and in-service operations).

2. UK Additional Requirements for import form the type as listed in CAA Publication CAP 480.

NOTE: UK Additional Requirements for import result from the application of the CAA Applicable Airworthiness Requirements which are listed in CAP 480 for the type. CAA approval to the type design is also subject to the application of these requirements.

CERTIFICATION BASIS: ATR 42-500 Series

UK certification of the type design was based on the French (DGAC) requirements, a movement to harmonise the Type Design between DGAC and the CAA took place:-

1. Requirements of certificating state

(a) DGAC Basic Requirements

JAR 25 change 13 including amendments 90/1, 91/1 and 93/1 - Subpart B, except for paragraphs 25.101, 105,109, 113, 115 & associated ACJ's modified according to NPA 25 BDG-244 dated March 1992.

JAR 25 at Change 13 including amendments 90/1, 91/1 and 93/1 - Subpart C for landing gear related parts only.

JAR 25 at Change 13 - Subpart C except for 25.561, 562, 785, 787 & associated ACJ's which remain at Change 12 and except for landing gear related parts.

JAR 25 at Change 13 - Subpart D, E, F & G except for paragraphs 25.735, 25.1591 & associated ACJ's modified according to NPA 25 BDG-244 dated March 1992.

(b) DGAC Special Conditions: ATR 42-500

- B5 "Stickpusher" (issue 02/94 - CRI B02)
- O1 "Demonstration of endurance" (issue 00/85 - CRI 01)
- D7 "Lightning protection indirect effects"
- F2 "Low altitude automatic pilot engagement after Take Off"
- F3 "Effect of external radiations upon aircraft systems"

Plus, the following requirements related to general aircraft experience and applied by the DGAC as an improvement of safety levels:

- NPA 25F-219 "Flight characteristics in icing conditions Iss.2 (superseding ATR 72 S.C.B6)
- NPA 25DF-179 "Operation without normal electrical power" (as published in O.P.90/1)
- NPA 25DF-191 "Miscellaneous requirements" (as published in O.P. 90/1)
- NPA 25D-181 "Resistance to fire terminology" (as published in O.P. 91/1)
- NPA 25D-206 "Emergency exit marking" (as published in O.P. 91/1)
- NPA 25D-227 "Compartment interior" (as published in O.P. 93/1)

Plus, the following DGAC "Equivalent Safety Finding":

- Stall and stall warning speeds and manoeuvre capability "1g Stall speeds". (Se S.C. B7 and associated CRI B01)

Plus, for CAT II operation:

- JAR AWO Subpart 2, Change 1

Plus, for environmental standards:

- Arrete du 19/02/87 (ICAO annexe 16 Chapter 111)

2. UK Additional Requirements for import form the type as listed in CAA Publication CAP 480.

NOTE: UK Additional Requirements for import result from the application of the CAA Applicable Airworthiness Requirements which are listed in CAP 480 for the type. CAA approval to the type design is also subject to the application of these requirements.

CERTIFICATION BASIS: ATR 72

UK certification of the type design was based on the French (DGAC), requirements plus DGAC Special Conditions with the addition of UK special conditions and additional requirements as follows:-

1. <u>Requirements of Certificating State:</u>

	DGAC Basic Requirements	**CAA Corresponding Requirements**
	JAR 25 Change 11	JAR 25 Change 11
	JAR AWO Change 1	JAR AWO Change 1
	JAR 25 Amendment 86 / 1 (Paras 603, 365, 843, 812, 853)	JAR 25 Amendment 86 / 1 (Paras 603, 365, 843, 812, 853)
	JAR 25 Amendment 87 / 1 (Paras 571, 905)	JAR 25 Amendment 87 / 1 (Paras 571, 905)
	JAR 25X Amendment 88 / 1 (Paras 25.20, 335, 345)	JAR 25X Amendment 88 / 1 (Paras 25.20, 335, 345) + JAR 25 25.351
(b)	**DGAC Special Conditions: ATR 72**	**CAA Corresponding Requirements**
	B5 Stick Pusher	JAR NPA 25B-154, 5 June 1985
	B6 Flight in icing conditions- Handling Characteristics and Performance Aspects(2)	Same
	B7 1-g stall speeds	Same, as amended by CAA special condition ATR 72 / 001.
	D7 Lightening Protection- Indirect Affects	Same
	F2 Low Altitude Autopilot Engagement after take-off (JAR AWO paper 13)	Same
	F3 Effect of External Radiations upon Aircraft Systems (HIRF)	Same
	O1 Demonstration of Endurance	No additional flying required (covered by existing endurance demonstration flying and in service operations)

2. UK Additional Requirements for import form the type as listed in CAA Publication CAP 480.

NOTE: UK Additional Requirements for import result from the application of the CAA Applicable Airworthiness Requirements which are listed in CAP 480 for the type. CAA approval to the type design is also subject to the application of these requirements.

CERTIFICATION CATEGORY: UK: Transport Category (Passenger)

PERFORMANCE CATEGORY: UK: Group A

FLIGHT MANUAL:

ATR42-300, -320:
The limitations, recommended procedures and information required are contained in the ATR42 Model 300 Airplane Flight Manual approved by DGAC on behalf of the CAA.

ATR42-500:
Airplane Flight Manual approved by DGAC on behalf of CAA.

ATR72-101,-201,-102,-202,-211,-212
Airplane Flight Manual approved by DGAC on behalf of CAA

ENGINE:

ATR42-300:	Two Pratt & Whitney of Canada PW 120 engines.
ATR42-320:	Two Pratt & Whitney Canada PW121 engines - Transport Canada TCDS number E19. FAA TCDS P7NE refers.
ATR42-500:	Two Pratt & Whitney Canada PW127E engines. FAA TCDS E880 refers.
ATR72-101,-201,-102,-202	Two Pratt & Whitney Canada PW124B engines. FAA TCDS P7NE refers. Transport Canada TCDS E19 refers.
ATR72-211,-212	Two Pratt & Whitney Canada PW127 engines. FAA TCDS 21B0 refers.

PROPELLER

ATR42-300, -320:	Two Hamilton Standard 14SF-5 Propellers.
ATR42-500:	Two Hamilton Standard 568-F propellers.
ATR72-101,-201,-102,-202	Two Hamilton Standard 14SF-11 or -11E (modification 4371) Propellers.
ATR72-211,-212	Two Hamilton Standard HS247F-1 propellers.

MAXIMUM WEIGHTS:

ATR42-300	Lb	Kg
Maximum Taxying weight	35645	16170
Maximum take-off weight	35605	16150
Maximum landing weight	35270	16000
Maximum zero fuel weight	32625	14800

ATR42-320	Lb	Kg
Maximum Taxying weight	37632	17070
Maximum take-off weight	37258	16900
Maximum landing weight	36160	16400
Maximum zero fuel weight	34259	15540

ATR42-500	Lb	Kg
Maximum Taxying weight	4130	18770
Maximum take-off weight	41005	18600
Maximum landing weight	40344	18300
Maximum zero fuel weight	36817	16700

ATR72-101,-201,-102,-202,-211,212	Lb	Kg
Maximum Taxying weight	47465	21530
Maximum take-off weight	47400	21500
Maximum landing weight	47068	21350
Maximum zero fuel weight	43430	19700

DIMENSIONS:

ATR42-300	**Ft**	**M**
Length	74'8	22.7
Wingspan	80'7	24.57
Height	24'11	7.59
Wing area	586.8^2	54.5^2

ATR42-320 & ATR42-500	**Ft**	**M**
Length	74' 6	22.70
Wingspan	80' 7	24.57
Height	24' 11	7.59
Wing area	586.84^2	$54.514m^2$

ATR72-101,-201,-102,-202,211, 212	**Ft**	**M**
Length	89'9	27.16
Wingspan	88'9	27.07
Height	25'1	7.65
Wing area	656.6^2	$61m^2$

MINIMUM CREW: UK: Two Pilots (All Models)

MAXIMUM OCCUPANTS/PASSENGERS:

ATR42-300: Number of persons, including crew, not to exceed 55 (limited by cabin space).

ATR42-320; ATR42-500: Number of persons, including crew, not to exceed 60 passengers (limited by cabin space).

ATR72-101,-102,-102,-202,-211,-212 Number of persons, including crew, not to exceed 74 passengers (limited by cabin space).

OPERATING LIMITATIONS:	Reference flight manual approved by DGAC on behalf of the CAA.
MANDATORY MAINTENANCE INSTRUCTIONS:	**All Models:** Refer to Maintenance Planning Document (MPD) Chapter 13 "Time Limits" ATR42 Structural Repair Manual - Item b.
NOISE:	ATR42: CAA Noise type Certificate No. 120. ATR72: CAA Noise Type Certificate No.159

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