European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

ATP

Type Certificate Holder:

BAE SYSTEMS (OPERATIONS) LTD

Prestwick International Airport
Monkton
Ayrshire
Scotland
KA9 2RW
United Kingdom

(Aircraft manufactured by British Aerospace Woodford 1986 through 1992)

For model: ATP

Issue 2, 15 January 2015

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SECTION 1: GENERAL

1. Data Sheet No.:	EASA.A.192 (Replacing UK CAA BA 23)
2. Airworthiness Category:	Large Aeroplanes
3. Performance Category:	A
4. Certifying Authority:	EASA
5. Type Certificate Holder:	BAE SYSTEMS (Operations) Ltd Prestwick International Airport Monkton Ayrshire Scotland KA9 2RW United Kingdom
6. Construction Numbers:	2001 and subsequent

SECTION 2: ATP

I. General

1. Aircraft: ATP

II. Certification Basis

1. Reference Date for Determining the Applicable Requirements - UK CAA Certification Application Date: March 1982

2. EASA (UK CAA) Certification Date: 16 March 1988

3. EASA Certification Basis:

(a) JAR Part 1 Change 3

(b) JAR Part 25 Change 8 plus UK National Variants plus Orange Paper 81/2 voluntarily complying with JAR Part 25 Change 10 plus NPA 25C-112 (Prop Debris)

(c) JAR Part P Change 6

(d) JAR Part E Change 6

(e) BCAR Section A Issue 25 – including route proving

(f) UK CAA Airworthiness Notices

Compliance with all relevant Airworthiness Notices

No.	Title
11	Acceptance of Aeronautical parts
39	Selection and procurement of electronic components
43	Aircraft TC and TCDS
44	Gas turbine parts subject to retirement or ultimate (scrap) lives
45	Software Management and Certification
56	Floor proximity emergency escape path markings
58	Flame resistant furnishing material
59	Aircraft seats and berths – resistance to fire
60	Cabin and toilet fire protection
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75	Overhaul and inspection requirements for variable pitch propellers

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79	Access to and opening of type III and IV emergency exits
81	Emergency Power supply for Electrically Operated Gyroscopic Bank and Pitch Indicators (Artificial Horizons)
83	Fire precautions – Aircraft toilets
85	Automatic DF Equipment on turbine-engined aeroplanes and helicopters
89	Continuing structural integrity of transport aeroplanes
91	Communications Transmitters in the VHF Radio telephony band 118 - 136 MHz
93	Tyres and wheel fitted to aircraft certificated in the Transport Category
99	Galley equipment

(g) CAA Specifications

Compliance with all relevant CAA Specifications

Spec No.	Title
1	Safety belts
2	Seat tests with belts
4	Safety harnesses
6	Escape chutes
7	Break-in points
8	Flame resistance testing for aircraft interior materials
10	Flight Data Recorder Systems
11	Cockpit voice Recorder systems
12	Underwater Sonar location Device
14	Ground Proximity Warning systems
15	Public Address System

(h) Interpretive Material

BCAR Paper	671	Integrity of doors and hatches
	705	Electrical supply system and equipment
	09	Manoeuvring stability requirements

BCAR Section R, Chapter R4-2 para 6.3 – As Compliance material for UK ANO Schedule 5 Scale N and Article 34(7) 1985

JAR Flt Working Paper No. Performance 36 Issue 2		Interpretive material for unpaved runway Abnormal configuration and short landing
	187	Landing – abnormal configuration
	205	Short Landings

CAA Doc. 9/32/B1/0/44X - Structural Aspects for Airworthiness of composite materials

(i) Flight Representative of Typical Operational Use

Referring to BCAR Section A, Sub-section A5-2 paragraph 2.3.1 one aircraft of the proposed final build standard will be required to complete 200 flying hours representative of typical operational use.

4. Special Conditions:

The following Special Condition has been developed post Type Certification:

EASA CRI H-01 - Enhanced Airworthiness Programme for Aeroplane Systems, ICA on EWIS

5. Exemptions:

None

6. Equivalent Safety Findings:

None

7. Environmental Standards:

BCAR Section N Issue 4 Noise

III <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: ATP – JD000J0023-008 Issue 7
(Aircraft Master Definition Drawing No.)
Additionally, to ensure correct operation of the standby compass, the following modifications must be installed:-
i) JDM35113A (in-service embodiment by SB ATP-33-8)
ii) JDM10194B (in service embodiment by SB ATP-24-34)
iii) Aircraft s/n 2002 to 2033 only - JDM10194A (in-service embodiment by SB ATP-24-34).

2. Description:

Low wing turboprop transport with conventional tail unit configuration, powered by two turbopropeller engines mounted conventionally above the wings driving six bladed propellers.

3. Equipment:

The basic required equipment as prescribed in the applicable airworthiness regulations and listed in Approval register BAe-MEA-R-ATP-009043 must be installed in the aircraft for certification. The Illustrated Parts Catalogue also contains all equipment approved for installation in the aeroplane.

4. Dimensions:

Length	26.009m (85ft 4in)
Wingspan	30.632m (100ft 6in)
Height	7.14m (23ft 5in)
Wing Area	78.30m^2 (842.83ft^2)
Height with shortened nose leg (Post mod JDM30039B)	7.37m (24ft 2in)

5. Engines:

Two:

Pratt and Whitney PW 126 engines
or
Pratt and Whitney PW 126A engines (Post mod JDM30067F)

Engine Limits:

Engine	Operating Condition	Max Torque	Max NP (a)	Max NH	Max NL	Max ITT	Time Limit
		%	%	%	%	°C	
PW126	Max (b) Contingency	108.3	101	103.2	103.8	830	2 ½ min
	Inter (b) Contingency	97.5	101.0	102.2	102.2	800	Unlimited
	Take-off	90.5	101.0	100.2	100.2	760	5 min
	Max (c) Continuous	90.5 (d)	101.0	100.2	100.2	760	Unlimited
	Min Idle	-	-	Min 66	-	-	Unlimited
	Starting	-	-	-	-	950	5s
	Transient	120.0	115.0	-	-	840	20 s
PW126A	Max (b) Contingency	108.3	101.0	102.1	103.8	800	10 min
	Take-off	97.5	101.0	100.6	101.5	765 (f)	5 min
	Max Continuous	97.5 (e)	101.0	102.1	103.8	800	Unlimited
	Min Idle	-	-	Min 66	-	-	Unlimited
	Starting	-	-	-	-	950	5s
	Transient	120.0	115.0	103.1	103.8	840	20s

NOTES

(a) Overspeed due to propeller system malfunction permissible up to 115% for max 15 mins subject to maintenance action.

(b) Single engine only.

(c) Maximum unrestricted two engine power setting for use only when operationally essential (same setting as take-off on this particular engine).

(d) Torque may be increased to 103.9% for operation at propeller rpm in the range 80% to 85%.

(e) Torque may be increased to 108.3% for operation at propeller rpm in the range 80% to 85%.

(f) 765°C below 25 °C SAT, increasing linearly to 772 °C at 50 °C SAT.

For detailed engine limitations see ATP 003 and ATP 005 series Aircraft Flight Manuals and relevant Engine Type Certificate Data Sheet.

6. Auxiliary Power Unit (APU): Garrett GTCP36-150 (J)

7. Propellers:

British Aerospace/Hamilton Standard type 6/5500/F-1 propellers.

Propeller Limits:

Continuous ground operation between 47.6% NP and 63.6% NP is not permitted.

All static ground running above 80% NP must be done with the aircraft facing into the wind ±45 degrees, when the wind velocity exceeds 10 knots.

For detailed propeller limitations see ATP 003 and ATP 005 series Aircraft Flight Manuals and relevant Propeller Type Certificate Data Sheet.

8. Fluids (Fuel/Oil/Additives):

For details of approved fuels, oils and additives see the ATP 003 and ATP 005 series Aircraft Flight Manuals.

9. Fluid Capacities:

9.1 Fuel Capacity:

Fuel Capacity	UK Gal	US Gal	litres	kg	lb
Usable	1400	1681	6365	5092	11,226
Unusable	<1	<1.2	<4.54	<3.6	<8
Total	1400	1681	6365	5092	11,226

Note: Conversion of 0.8 kg/litre. Capacity based on pressure refuelling.

9.2 Oil Capacity:

Each engine and oil tank combined:
27.3 litres
6 UK gallons
7.2 U.S. gallons

10. Air Speeds: Refer to ATP 003 and ATP 005 series Aircraft Flight Manuals

11. Maximum Operating Altitude: 25,000ft

12. All Weather Capability: Category 2

13. Maximum Weights:

Condition	Pre-mod JDM10271F		Post-mod JDM10271F	
	lb	Kg	lb	Kg
Maximum Taxying weight	50,700	22,999	52,350	23,746
Maximum take-off weight	50,550	22,930	52,200	23,678
Maximum landing weight	49,050	22,250	51,000	23,133
Maximum zero fuel weight Pre-mod JDM10433A	46,800	21,230	–	–
Maximum zero fuel weight Post-mod JDM10433A	48,000	21,772	48,000	21,772

Variations in aircraft maximum weights are allowed through modification action. This will result in an amendment to the Aircraft Flight Manual.

14. Centre of Gravity Range: Refer to ATP 003 and ATP 005 series Aircraft Flight Manuals

15. Datum: Refer to Weight and Balance Manual

16. Standard Mean Chord (SMC): Refer to Weight and Balance Manual

17. Levelling Means: Refer to Weight and Balance Manual

18. Minimum Flight Crew: Two (Pilot and Co-pilot) for all types of flight

19. Maximum Seating Capacity (including crew): 77

20. Emergency Exits:

Location	Type	Size	
		mm	inches
One Passenger Entry Door - Left Side (Front Cabin)	Type I	1727 x 711	68 x 28
One Passenger Entry Door - Left Side (Rear Cabin)	Type I	1575 x 711	62 x 28
One Service Door – Right Side (Rear Cabin)	Type I	1245 x 610	49 x 24
Two Overwing Emergency Exits - Left & Right Side	Type III	914 x 508	36x20

Sliding windows on the left and right hand side provide escape routes from the flight deck.

21. Baggage/Cargo Compartments:

Location	Class	Max Allowable Load	
		kg	lb
Forward	D	766	1689
Forward (Alternative)	D	955	2105
Rear	D	1055	2326

Or as otherwise placarded on the aircraft.

22. Wheels and Tyres:

Landing Gear: Hydraulically retractable tricycle
Track: 8.46m (27ft 9in)
Wheelbase: 9.70m (31ft 9.7in)

Nosegear: 2 wheels per unit
Tyres: 22 x 6.75-10, Ply rating 8, Actual plies 4
Maximum Tyre Pressure: 73 psig (4.9 bar g)

Maingear: 2 wheels per unit
Tyres: 34.5 x 12-14, Ply rating 14, Actual plys 6
Maximum Tyre Pressures: 95.4 psig (6.6 bar g)

IV Operating and Service Instructions

The following publications provide the necessary information to enable the subject aircraft to be operated and maintained satisfactorily:

1. Aircraft Flight Manual: ATP 003, ATP 005
2. Manufacturers Operations Manual: ATP MOM/XXX
3. Maintenance Review Board Report: ATP MRB/01
4. Manufacturers Maintenance Manual: ATP AMM/XXX
5. Structural Repair Manual: ATP SRM
6. Wiring Diagram Manual: ATP WDM/XXX
7. Illustrated Parts Catalogue: ATP IPC/XXX
8. Weight and Balance Manual: ATP WBM/2XXX
9. Master Minimum Equipment List: ATP MMEL/XXX
10. Manufacturers Service Bulletins approved under the authority of UK CAA Approval DAI/1103/38 or DAI/9386/92 or DAI/1011/55 or JAA JAR 21 Approval CAA.JA.02034 or EASA Part 21 Approval EASA.21J.047.
11. FAR Part 26 Compliance Source Document for BAE Systems BAe Advanced Turbo Prop (ATP) Aircraft: MSD/002/ATP

Note: Airworthiness Limitations and Certification Maintenance Requirements are listed in Chapter 05 of the Manufacturers Maintenance Manual.

V. Notes

1. Cabin Interior and Seating Configurations must be approved.

SECTION 3: Change Record

Issue	Date	Changes	TC issue
Issue 1.0	30/09/09	First Issue of EASA TCDS	Initial Issue, 30/09/09
Issue 2.0	15/01/15	Front Page, List of Effective Pages deleted Section 1, item 1, Data Sheet No., "(replacing UK CAA BA 23)" added Section 2, sub section II, item 4, EASA Certification Basis, Special Condition H-01 added Section 2, sub section IV, item 11, EWIS Source Document added Section 3, Change Record added	30/09/09