European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

EASA.A.388

BN2 Islander Series Aircraft

Type Certificate Holder:

Britten-Norman Aircraft Limited
The Airport,
Bembridge,
Isle of Wight
PO35 5PR

For Models:

Islander BN2A-8, -9, -20, -21, -26, -27
Islander BN2B-20, -21, -26, -27
Islander BN2T, -4R, -4S

Issue 1: 08 November 2011

CONTENT

SECTION 1: BN2A and BN2B

A.I. General

1. Data Sheet No.:	EASA A.388	
2. a) Type:	BN2A BN2B	
b) Variant:	BN2A-8 BN2A-9 BN2A-20 BN2A-21 BN2A-26 BN2A-27 BN2B-20 BN2B-21 BN2B-26 BN2B-27	
3. Airworthiness Category:	Part 23, Normal Category (see section 5, II. Note 1)	
4. Reserved		
5. UK CAA Certification Date:	BN2A-8 BN2A-9 BN2A-20 BN2A-21 BN2A-26 BN2A-27 BN2B-20 BN2B-21 BN2B-26 BN2B-27	13-07-1972 25-05-1972 16-07-1973 07-12-1973 07-06-1974 16-08-1974 09-10-1979 10-12-1979 02-04-1979 02-04-1979
6. EASA Type Certification Date:	see section 5, II. Note 2	

A.II. EASA Certification Basis

1. Certification Basis: The following requirements were the basis of certification of the BN2A and BN2B type design:
BCAR Section D – Aeroplanes – Issue 6, dated 1 November 1963, sub-sections D1, D3, and D4, except that D4-2 paragraph 3.2.2, bird impact requirement, is met with a 2 lb bird which is the equivalent of the BCAR Section K Chapter K4-2 paragraph 3.2.2 requirements.

   BCAR Section K – Light Aeroplanes – Issue 1 dated 15 September 1966, sub-sections K2, K5, K6 & K7.

   Non-compliance with the following requirements has been accepted:

   BCAR Section D – Aeroplanes Issue 6
   - Chapter D3-9 paragraph 5.1
   - Chapter D4-4 paragraph 3.2.2
   - Chapter D4-5 paragraph 3.6.2
   - Chapter D4-8 Appendix paragraph 8.

2. Requirements elected to comply: None

3. Special Conditions: None

4. Reserved

5. Equivalent Safety Findings: None

6. Environmental Standards: ICAO Annex 16 Volume I
(see EASA TCDSN A.388 for details)

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

BN2A-8	NB-M-475
BN2A-9	NB-M-454
BN2A-20	NB-M-571
BN2A-21	NB-M-574
BN2A-26	NB-M-590
BN2A-27	NB-M-591
BN2B-20	NB-M-982
BN2B-21	NB-M-983
BN2B-26	NB-M-984
BN2B-27	NB-M-985

2. Description: Twin engine, high wing Aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed ten. The number is limited by spacing available in the cabin.

3. Equipment: Master Minimum Equipment List Islander BN2A and BN2B, Revision 3, dated 19th April 2010

4. Dimensions:

Span	49 ft 0 in	(14.92 m)
Span *	53 ft 0 in	(16.15 m)
Length	35 ft 7 in	(10.90 m)
Height	13 ft 8.7 in	(4.18 m)
Wing Area	325.0 sq ft	(30.20 m^2)
Wing Area *	337.0 sq ft	(31.31 m^2)

* When modification NB-M-364 Wing tip tank is incorporated.

5. Engines:

2 Avco Lycoming O-540-E4C5 (260hp) for BN2A-8, -9, -26, -27, BN2B-26, -27

or

2 Avco Lycoming IO-540-K1B5 (300hp) for BN2A-20, -21, BN2B-20, -21

6. Reserved:

7. Propellers: One of the following Hartzell Propeller types fitted to each engine:

HC-C2YK-2B/8477-4
HC-C2YK-2B/C8477-4 or….-6
HC-C2YK-2B/C8477A-4 or….-6
HC-C2YK-2C/C8477-4 or….-6
HC-C2YK-2C/C8477A-4 or….-6
HC-C2YK-2CF/FC8477A-4 or….-6
HC-C2YK-2CUF/FC8477A-4 or….-6
HC-C3YR-2UF/FC8468-8R for BN2B-26 and -27 with O-540-E4C5 engines, (modification NB-M-1361)
HC-C3YR-2UF/FC7693F for BN2B-20 and -21 with IO-540-K1B5 engines, (modification NB-M-1772)

8. Maximum Masses:

Variant	Maximum Weight for:		
	Taxiing + Take-off	Landing	Zero Fuel
BN2A-8	6300 lb (2858 kg)	6300 lb (2858 kg)	6150 lb (2789 kg)
BN2A-9	6300 lb (2858 kg)	6300 lb (2858 kg)	6100 lb (2767 kg)
BN2A-20	6600 lb (2994 kg)	6300 lb (2858 kg)	6300 lb (2858 kg)
BN2A-21	6600 lb (2994 kg)	6300 lb (2858 kg)	6200 lb (2812 kg)
BN2A-26	6600 lb (2994 kg)	6300 lb (2858 kg)	6300 lb (2858 kg)
BN2A-27	6600 lb (2994 kg)	6300 lb (2858 kg)	6200 lb (2812 kg)
BN2B-20, - 26	6600 lb (2994 kg)	6600 lb (2994 kg)	6300 lb (2858 kg)
BN2B-21, - 27	6600 lb (2994 kg)	6600 lb (2994 kg)	6200 lb (2812 kg)

A.IV. Operating and Service Instructions

1. Aircraft Flight Manual (AFM):

Aircraft	Flight Manual (AFM)
BN2A-8	FM/7
BN2A-9	FM/7 incl. supplement 17 for BCAR ops.
BN2A-20	FM/9
BN2A-21	FM/9 incl. supplement 10 for BCAR ops.
BN2A-26	FM/7
BN2A-27	FM/7 incl. supplement 17 for BCAR ops.
BN2A-8	FM/2 with revision 1008, or later.
BN2A-9	FM/2 with revision 1008, or later.
BN2B-20	FM/41
BN2B-21	FM/41 including Supplement 1.
BN2B-26	FM/40
BN2B-27	FM/40 including Supplement 1.

2. Aircraft Maintenance Manual (AMM): Document No. MM/1 Volumes 1, 2 and 3

3. Maintenance Schedule (MS): Document No. MS/1

A.V. Notes

None.

SECTION 2: BN2T

B.I. General

1. Data Sheet No.: EASA A.388

2. a) Type: BN2T

   b) Variant: Not Applicable

3. Airworthiness Category: Part 23, Normal Category (see section 5, II. Note 1)

4. Reserved

5. UK CAA Certification Date: 11/04/1985

6. EASA Type Certification Date: see section 5, II. Note 2

B.II. Certification Basis

1. Certification Basis: The following requirements were the basis of certification of the BN2T type design:

   BCAR Section D – Aeroplanes – Issue 6, dated 1 November 1963, sub-sections D3, and D4, except that D4-2 paragraph 3.2.2, bird impact requirement, is met with a 2 lb bird which is the equivalent of the BCAR Section K Chapter K4-2 paragraph 3.2.2 requirement.

   BCAR Section J – Electrical – Issue 3, dated 15 September 1966.

   BCAR Section K – Light Aeroplanes – Issue 6, dated 10 April 1974, sub sections K1, K2, K5, K6 and K7.

   BCAR Section N – Noise – Issue 2, dated 10 November 1978.

   BCAR Section R – Radio – Issue 4, dated 10 April 1974.

   BCAR Blue Papers:
   673, 10 March 1978: Pilot Intercommunication In Light Aeroplanes.

738, 19 Sept 1979: Amendments to Section K to achieve consistency with section N.

CAA Airworthiness Notices:
33, Issue 3, 1 Feb 1972: Unprotected Starter Circuits in Aircraft not exceeding 12.500 lb.
76, Issue 3, 1 April 1980: Power Supply Systems for Aircraft Radio Installations.
82, Issue 1, 7 June 1973: Electrical Generation Systems – Aircraft not exceeding 5.700 kg maximum authorised weight.

2. Requirements elected to comply: None.

3. Special Conditions: None.

4. Reserved

5. Equivalent Safety Findings: None.

6. Environmental Standards: ICAO Annex 16 Volume I
(see EASA TCDSN A.388 for details)

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: NB-M-1218

2. Description: Twin engine, high wing Aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed ten. The number is limited by spacing available in the cabin.

3. Equipment: Master Minimum Equipment List Islander BN2T, Revision 3 dated 19th April 2010

4. Dimensions:

Span	49 ft	0 in	(14.92 m)
Length	35 ft	7 in	(10.90 m)
Height	14 ft	5.2 in	(4.45 m)
Wing Area	325.0	sq ft	(30.20 m^2)

5. Engines: 2 Allison 250-B17C engines rated at 320 shp

6. Reserved

7. Propellers: 2 Hartzell HC-C3YF-5F/FC8475FK-6
8. Maximum Masses:

Variant	Maximum Weight for:		
	Taxiing + Take-off	Landing	Zero Fuel
BN2T (NB-M-1104)	6600 lb (2994 kg)	6600 lb (2994 kg)	6300 lb (2858 kg)
BN2T (NB-M-1218)	7000 lb (3175 kg)	6800 lb (3084 kg)	6600 lb (2994 kg)

B.IV. Operating and Service Instructions

1. Aircraft Flight Manual (AFM): FM/100

2. Aircraft Maintenance Manual (AMM): Document No. MM/4 Volume 1

3. Maintenance Schedule (MS): Document No. MS/5

B.V. Notes

None.

SECTION 3: BN2T-4R

C.I. General

1. Data Sheet No.: EASA A.388

2. a) Type: BN2T-4R

   b) Variant: Not Applicable

3. Airworthiness Category: Part 23, Normal Category (see section 5, II. Note 1)

4. Reserved

5. UK CAA Certification Date: 28/06/1991

6. EASA Type Certification Date: see section 5, II. Note 2

C.II. Certification Basis

1. Certification Basis: The following requirements were the basis of certification of the BN2T-4R type design:-

   BCAR Section D – Aeroplanes – Issue 6, dated 1 November 1963, sub-sections D3 (except D3-5) and D4, except that D4-2 paragraph 3.2.2 bird impact requirement, is met with a 2 lb bird which is the equivalent of the BCAR Section K Chapter 4.2 paragraph 3.2.2 requirement.

   BCAR Section K – Light Aeroplanes - Issue 6, dated 10 April 1974 sub-section K1, K2 (except K2-2, 2-8 paras 4 and 6.5, 2-10 para 4.1-3, -4, -5), K5, K6 and K7 (except K7-5, 7).

   BCAR Section N – Noise – Issue 5, dated 1 August 1990.

   BCAR Section R – Radio – Issue 4, dated 10 April 1974

   BCAR 23 Light Aeroplanes – Issue 1, dated December 1987, Paragraphs 23.471 to 23.511 inclusive and 23.629.

   JAR 23 – Normal, Utility, Aerobatic and

Commuter category Aeroplanes – Draft Issue 4: 23.45-23.77 inclusive, 23.147 (b), 23.149, 23.177(b), 23.1583(c)(3), 23.1585(a)(3),(a)(6) and (c)(1) to (c)(4) inclusive and 23.1587.

BCAR Blue Papers –

K600, 5 April 1982: Powerplant Installations cooling system.

647, 21 Nov 1979: Seats, Safety Belts & Harnesses.

673, 10 March 1978: Pilot Intercommunication In Light Aeroplanes.

K706, 31 August 1988: Electrical Supply, Systems & Equipment (replacing BCAR Section J).

731, 1 August 1979: Gyroscopic Rate of Turn Indicators.

738, 19 Sept 1979: Amendments to Archive Consistency with Section N.

K741, 18 April 1984: Autopilots and Flight Directors.

K775, 5 April 1982: Installations Assumptions involved in engine certification.

CAA Airworthiness Notices:

5, Issue 1, 1April 1972: Tyre Wear Limitations.

11, Issue 8, 1 Nov 1983: Acceptance of Aeronautical Parts.

33, Issue 3, 1 Feb 1972: Unprotected Starter Circuits in Aircraft not exceeding 12.500 lb.

36, Issue 9, 2 Oct 1981: Mandatory Modifications & Inspections.

39, Issue 4, 16 Sept 1988: Selection of Procurement of Electronic Components.

40, Issue 1, 1 Nov 1966: Carbon Monoxide Contamination in Aircraft.

41, Issue 8, 2 Oct 1981: Maintenance of Cockpit & Cabin Combustion Heaters and their associated Exhaust Systems.

42, Issue 1, 20 July 1979: Internal Emergency Lighting System.

45, Issue 1, 1 Nov 1983: Software Management.

45A, Issue 1, 1 July 1986: Software Management & Certification Guidelines.

53, Issue 1, 26 June 1970: Vertical Speed Indicators on Imported aircraft.
54, Issue 1, 26 June 1970: Instruments with unusual presentations.
55, Issue 2, 5 Oct 1973: Routine Maintenance of Propeller Blades.
58, Issue 4, 10 Dec 1986: Flame Resistant Furnishing Materials.
66, Issue 2, 18 Oct 1972: Aircraft Insurance.
75, Issue 9, 1 April 1983: Overhaul & Inspection Requirements for Variable Pitch Propellers.
76, Issue 3, 1 April 1980: Power Supply Systems for Aircraft Radio Installations.
82, Issue 1, 7 June 1973: Electrical Generation Systems – Aircraft not exceeding 5.700 kg maximum authorised weight.
87, Issue 1, 6 Nov 1987: Failure of Mechanical Products inc. Circuit Breakers.
91, Issue 2, 1 Nov 1983: Communications Transmitters in the VHF Radio Frequency Band 118 - 137MHz.
92, Issue 1, 15 Jan 1981: Cargo Containment.

CAA Specifications:
No. 1, Issue 5, 24 Sept 1979: Safety Belts.
No. 3, Issue 3, 10 July 1953: Tests for Seats with safety belts attached.
No. 4, Issue 2, 1 Feb 1962: Safety Harnesses.
No. 13, Issue 1, 24 Sept 1979: Diagonal Shoulder Harness

2. Requirements elected to comply: None.

3. Special Conditions: None.

4. Reserved

5. Equivalent Safety Findings: None.

6. Environmental Standards: ICAO Annex 16 Volume I
(see EASA TCDSN A.388 for details)

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: NB-M-1359 Appendix 1 (S/N C2143 and C2115 only).

2. Description: Twin engine, high wing Aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed ten. The number is limited by spacing available in the cabin.

3. Equipment: Master Minimum Equipment List Islander BN2T, Revision 3, dated 19 April 2010

4. Dimensions:

Span	49 ft 0 in	(14.92 m)
Length	35 ft 7 in	(10.90 m)
Height	13 ft 7.25 in	(4.15 m)
Wing Area	325.0 sq ft	(30.20 m^2)

5. Engines: 2 Allison 250-B17F/1

6. Reserved

7. Propellers: 2 Hartzell HC-C3YF-5F/FC7818K

8. Maximum Masses:

Variant	Maximum Weight for:		
	Taxiing + Take-off	Landing	Zero Fuel
BN2T-4R	8500 lb (3855 kg)	8500 lb (3855 kg)	8300 lb (3764 kg)

C.IV. Operating and Service Instructions

1. Aircraft Flight Manual (AFM) FM/400

2. Aircraft Maintenance Manual (AMM) Document No. MM/4 Volume 1

3. Maintenance Schedule (MS) Document No. MS/6

C.V. Notes

None

SECTION 4: BN2T-4S

D.I. General

1. Data Sheet No.: EASA A.388

2. a) Type: BN2T-4S

   b) Variant: Not Applicable

3. Airworthiness Category: Part 23, Normal Category (see section 5, II. Note 1)

4. Reserved

5. UK CAA Certification Date: 15/11/1995

6. EASA Type Certification Date: see section 5, II. Note 2

D.II. Certification Basis

1. Certification Basis: The following requirements were the basis of certification of the BN2T 4S type design:

   BCAR Section D – Aeroplanes – Issue 6, dated 1 November 1963, sub-sections D3 and D4, except that D4-2 paragraph 3.2.2 bird impact, is to be met with a 2 lb bird, in lieu of the 4lb bird. This is the bird mass considered in BCAR Section K4-2 Paragraph 3.2.2, but D requires compliance at cruise speeds as well as climb and descent. See BCAR 23 and JAR 23 below for replacement requirements.

   BCAR Section K – Light Aeroplanes - Issue 6, dated 10 April 1974, sub-sections K1, K2, K5, K6 and K7. See JAR 23 below for replacement requirements.

   BCAR Section N – Noise - Issue 5, dated 1 August 1990.

   BCAR Section R – Radio - Issue 4, dated 10 April 1974.

   BCAR 23 – Light Aeroplanes – Issue 1,

dated December 1987.

i) Flutter Paragraph 23.629 is employed in lieu of D3-9.

Note BCAR 23.471 to 23.511 are Employed in lieu of D3-5. (Ref. CAA letter 13 March 1991).

JAR 23 Normal, Utility, Aerobatic and Commuter category Aeroplanes (Draft Issue 4 dated January 1992):

i) Performance aspects

Employ: JAR 23.45 to 23.77 and 23.1587 together with the parts of JAR 23.1583 and 23.1585 relevant to the attainment of scheduled performance (ie 23.1583(c)(3), 23.1585(a)(3), (a)(6) and (c)(1) to (4) inclusive and 23.149 invoked by 23.51, 23.69 and 23.75.
In lieu of BCAR Section K chapters K2-2, K2-3, K2-4, K2-5 and paragraph K7-5, 7 and BCAR Blue Paper K789.

ii) Handling

Employ: JAR 23.149, 23.147(b) and 23.177(b) in lieu of BCAR K2-8, 4, K2-8, 6.5 and K2-10, 4.1 respectively.

iii) Emergency Exits and Ventilation

Employ: JAR 23.807 Emergency Exits, JAR 23.811 Emergency Exit marking, JAR 23.831 Ventilation.
In lieu of: BCAR Section D (Issue 6) Chapter D4-3 Paragraph 5.2 Emergency Exits and D4-3 Paragraph 7 Ventilation.

iv) Brakes

Employ: JAR 23.735 in lieu of: BCAR D4-5, 3.5.

EFIS requirements contained in CAA letter 9/40: 34-22-02/BKL, dated 5 November 1993 (see AAN 24419).

BCAR Blue Papers

No K600, 5 April 1982: Powerplant Installations - Cooling Systems.

No 647, 21 Nov 1979: Seats, Safety Belts and Harnesses

No 673, 10 March 1978: Pilot Intercommunication in Light Aeroplanes.
No K706, 31 August 1988: Electrical Supply, System and Equipment (Replaces BCAR Section J).
No 731, 1 August 1979: Gyroscopic Rate of Turn indicators.
No 738, 19 Sept 1979: Amendments to achieve consistency with Section N
No K741, 18 April 1984: Autopilots and Flight Directors.
No K775, 5 April 1982: Installation Assumptions involved in Engine Certification.

CAA Airworthiness Notices:
5, Issue 1, 1 April 1972: Tyre Wear Limitations.
33, Issue 3, 1 Feb 1972: Unprotected Starter Circuits in aircraft not exceeding 12.500 lb.
36, Issue 11, 5 Nov 1993: Mandatory Modifications & Inspections.
39, Issue 4, 16 Sept 1988: Selection of Procurement of Electronic Components.
40, Issue 1, 1 Nov 1966: Carbon Monoxide Contamination in Aircraft.
41, Issue 8, 2 Oct 1981: Maintenance of Cockpit & Cabin Combustion Heaters and their associated Exhaust Systems.
42, Issue 1, 20 July 1979: Internal Emergency Lighting System.
45, Issue 1, 1 Nov 1983: Software Management.
45A, Issue 1, 1 July 1986: Software Management & Certification Guidelines.
53, Issue 1, 26 June 1970: Vertical Speed Indicators on Imported aircraft.
54, Issue 1, 26 June 1970: Instruments with unusual presentations.
55, Issue 2, 5 Oct 1973: Routine Maintenance of Propeller Blades.
58, Issue 4, 10 Dec 1986: Flame Resistant Furnishing Materials.
66, Issue 2, 18 Oct 1972: Aircraft Insurance.
75, Issue 9, 1 April 1983: Overhaul & Inspection Requirements for Variable Pitch Propellers.

76, Issue 3, 1 April 1980: Power Supply Systems for Aircraft Radio Installations.
82, Issue 1, 7 June 1973: Electrical Generation Systems – Aircraft not exceeding 5.700 kg maximum authorised weight.
87, Issue 1, 6 Nov 1987: Failure of Mechanical Products inc. Circuit Breakers.
91, Issue 3, 25 Oct 1994: Communications Transmitters in the VHF Radio Frequency Band 118-137MHz.
92, Issue 1, 15 Jan 1981: Cargo Containment.

CAA Specifications:
No. 1, Issue 5, 24 Sept 1979: Safety Belts.
No. 3, Issue 3, 10 July 1953: Tests for Seats with safety belts attached.
No. 4, Issue 2, 1 Feb 1962: Safety Harnesses.
No. 13, Issue 1, 24 Sept 1979: Diagonal Shoulder Harness

2. Requirements elected to comply: None.

3. Special Conditions: None.

4. Reserved

5. Equivalent Safety Findings: None.

6. Environmental Standards: ICAO Annex 16 Volume I
(see EASA TCDSN A.388 for details)

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: NB-M-1545

2. Description: Twin engine, high wing Aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed ten. The number is limited by spacing available in the cabin.

3. Equipment: Master Minimum Equipment List Islander BN2T-4S, Revision 3, dated 3 April 2010

4. Dimensions:

Span	53 ft	0 in	(16.15 m)
Length	40 ft	5 in	(12.31 m)
Height	14 ft	4.1 in	(4.37 m)
Wing Area	351	sq ft	(32.61 m^2)

5. Engines: 2 Allison 250-B17F/1 (400shp)

6. Reserved

7. Propellers: 2 Hartzell HC-C3YF-5F/FC7818K

8. Maximum Masses:

Variant	Maximum Weight for:		
	Taxiing + Take-off	Landing	Zero Fuel
BN2T-4S	8500 lb (3855 kg)	8500 lb (3855 kg)	8300 lb (3764 kg)

D.IV. Operating and Service Instructions

1. Aircraft Flight Manual (AFM): AFM/2T-4S

2. Aircraft Maintenance Manual (AMM): AMP/2T-4S

3. Maintenance Schedule: AMSP/2T-4S

4. Service Information and Service Bulletins: SB190 – 5 year structural inspection

D.V. Notes

None.

Section 5: Data Pertinent to all Models:

I. General:

1. Airworthiness Category: Part 23, Normal Category (see also Note 1 below)

2. Manufacturer: Britten-Norman Aircraft Limited
The Airport
Bembridge
Isle of Wight
PO 35 5PR

II. Notes:

Note 1: The original CAA UK TCDS BA8 used the term “Certification Category” for operational classifications against British rules as follows: Transport Category (Passenger) except for BN2T-4R which are Aerial Work Category.

Note 2: This EASA TCDS is based on the original UK C.A.A. T.C.D.S. BA8 Issue 13. The mentioned models and variants were transferred to EASA under the provisions of Commission Regulation 1702/2003.

Note 3: Islander BN2T-2 and BN2T-2R variants are not transferred from the UK CAA TCDS BA8 Issue 13.

ADMINISTRATIVE SECTION

I. Acronyms

II. Type Certificate Holder Record

III. Change Record

Change Record

Issue	Date	Changes
1	8 November 2011	Initial Issue