Civil Aviation Authority
United Kingdom

TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00043

for

BN2A Mark III Trislander Series Aircraft

Type Certificate Holder

Britten-Norman Aerospace Ltd

Commodore House
Mountbatten Business Centre
Millbrook Road East
Southampton
SO15 1HY
United Kingdom

Model(s):	BN.2A MARK III BN.2A MARK III-1 BN.2A MARK III -2 BN.2A MARK III -3
Issue:	2
Date of issue:	15 March 2024

TABLE OF CONTENTS

Section 1 General

I. General (All Models)

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

1. Details of the type design that affect the TCDS that have been approved or accepted by the CAA in the UK since 01 January 2021.
2. Details of the type design that affected the TCDS and were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS.A.389 at Issue 1 dated 23 November 2020 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

II. Explanatory Notes

1. History of State of Design Responsibility and Type Certificate

The BN2A Mark III Trislander Series aircraft was originally certificated by the UK CAA as State of Design under the UK Type Certificate BA6 (and associated TCDS).

Under the provisions of EU Commission Regulation 1702/2003 which established a new certification system under the authority of EASA as State of Design, the State of Design responsibilities transferred to EASA from the UK CAA. EASA created TC EASA.A.389 (and associated TCDS and TCDSN) on 23 November 2020, superseding the UK CAA Type Certificated BA6.

The UK withdrew from the European Union on 31 January 2020. Under the terms of the UK-EU Trade and Cooperation Agreement, Annex 30, Article 15, the UK CAA accepted the EASA TCDS EASA.A.389 Issue 1 dated 23 November 2020 which was the current EASA version at 31 December 2020, and resumed the State of Design responsibilities for the BN2A Mark III Trislander Series aircraft with effect from 01 January 2021.

The UK CAA has issued a new State of Design Type Certificate (UK.TC.A.00043) and associated TCDS (this document) and TCDS for Noise. This TCDS is based on the EASA TCDS EASA.A.389 Issue 1 dated 23 November 2020 (the version that was current at 31 December 2020) and incorporates changes to reflect the resumption of State of Design activities by the UK CAA and details of the type design that affect the TCDS that have been approved or accepted by the UK CAA in the UK since 01 January 2021

Britten-Norman Aircraft Ltd (UK.21J.0138) transferred its design activities to the legal entity Britten-Norman Aerospace Ltd (UK.21J.1019) on 15 March 2024. The Type Certificate and major change design approvals issued before 15 March 2024 to Britten-Norman Aircraft Ltd for these models are transferred to Britten-Norman Aerospace Ltd.

2. Airworthiness Category

The original CAA UK TCDS BA6 used the term “Certification Category” for operational classifications against British rules as follows: Transport Category (Passenger).

Upon creation of EASA.A.389 Issue 1, EASA categorised the BN2A Mark III Trislander Series aircraft as “Part 23, Normal Category”. This Airworthiness Category is retained.

3. Eligibility

Batches of significant component parts under the following construction numbers have not been released to service by the Aircraft Manufacturer: 1038, 1062, 1064, 1066, 1067,1068, 1069, 1070 and 1071. Aircraft constructed from these parts are therefore not eligible for inclusion on this type certificate data sheet.

Section 1: General, continued.

4. FAA Certification

In accordance with the agreement between the United States of America and the United Kingdom relating to reciprocal validation of export certificates of airworthiness, the compliance of the type design with additional requirements has also been assessed on the following basis.

1. CAA requirements for British Certification listed under A.II, B.II, C.II and D.II.
   NOTE: The items of non-compliance shown previously under A.II, B.II, C.II and D.II were accepted as not invalidating compliance with any comparable FAA requirement.
2. The paper which was published by FAA entitled 'FAA Additional Requirements for UK Airplanes, 12,500 lb or less Maximum Weight', dated 13th January 1970, subsequently issued by CAA as VA Note 5.
3. FAR 23 Section 23.1529 effective 5th February 1970 (amended 23-8) and Sections 23.1441, 23.1443, 23.1447 and 23.1449 effective 17th June 1970 (amendment 23-9).
4. FAR 135 Appendix A effective 19th July 1970.
5. FAA Special Conditions number 23-35-EU-7, issued 4th August 1971(Docket No. 11290).

NOTE: For compliance with items 4 and 5 above, modifications NB-M-501, NB-M-502 and NB-M-508 are included in the type design. An acceptable type design standard when compliance with FAR 135 Section 135.144 (i.e. Appendix A of Part 135) is not required, is the current BN.2A.Mark III basic design plus modification NB-M-510 only (NB-M-501, NB-M-502 and NB-M-508 are not included).

Section 2 BN.2A MARK III

I. General

1. Type / Variant or Model

a) Type: BN2A Mark III Trislander Series Aircraft

b) Model: BN.2A MARK III

c) Variant: N/A

2. Airworthiness Category

Part 23, Normal Category (see Section 1.II.2)

3. Manufacturer

Britten-Norman Aerospace Ltd

Bembridge Airport
Bembridge
Isle of Wight PO35 5PR
UK

4. State of Design Authority

United Kingdom CAA

5. Type Certificate Date

21 May 1971

6. Original UK CAA (State of Design) TCDS Number

(See Section 1.II.1 for explanatory notes)

BA6

II. Certification Basis

1. Reference Date for determining the applicable requirements

18 December 1970

2. Airworthiness Requirements

The following requirements were the basis of certification for the type design:

BCAR Section K – Light Aeroplanes – Issue 3, dated 1 October 1969.

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

BCAR Blue Papers:

377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
402, 24 September 1969 and is amended by ARB letter reference REQ/IBL dated 25 September 1970: Flight Manuals for Light Aeroplanes
497, 18 September 1969: Miscellaneous Amendments to Handling Requirements – First Set
503, 18 September 1969: Miscellaneous Amendments to Handling Requirements – Second Set

3. Special Conditions

CAA Special Conditions relating to the structure in document A48T.312/347 dated 26 October 1970, transmitted by ARB letter reference ABN 208 dated 18 December 1970.

CAA Special Condition relating to power failure warning for the rear engine contained in ARB letter reference DES/ABN208 dated 8 June 1971.

NOTE: For compliance with these special conditions modification NB-M-502 is included in the type design.

4. Exemptions

Non-compliance with the following requirements was accepted:

BCAR Section K – Light Aeroplanes Issue 3

Chapter K4-4, paragraph 2.3.4
Chapter K7-2, paragraph 2.5(a)(i)

5. Deviations

None

6. Equivalent Safety Findings

None

7. Environmental Protection

ICAO Annex 16 Volume I

(see TCDSN UK.TC.A.00043 for details)

8. Operational Suitability Certification Basis

MMEL: CS-MMEL, Initial Issue

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

NB-M-457

2. Description

Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).

3. Equipment

Document No. MMEL/2

4. Dimensions

Span	53 ft	0 in	(16.15 m)
Length	45 ft	8.5 in	(13.93 m)
Height	14 ft	2 in	(4.32 m)
Wing Area	337.0 sq ft		(31.31 m²)

5. Engine

5.1. Model

3 Avco Lycoming O-540-E4C5

5.2. Type Certificate

FAA E-295

5.3. Limitations

For all operation 2700 RPM (260hp)

6. Load factors

	Flap UP	Flap DOWN
Positive	+3.34g	+2.0g
Negative	-1.34g	-0g

7. Propeller

One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix …-4 or 78 inch diameter as indicated by suffix …-6) types fitted to each engine:

7.1. Model

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

7.2. Type Certificate

EASA.IM.P.130

7.3. Number of blades

2

7.4. Diameter

80 inch diameter as indicated by suffix …-4
or

78 inch diameter as indicated by suffix …-6

7.5. Sense of Rotation

Clockwise (pilot's view)

8. Fluids

8.1. Fuel

91/96 octane (minimum) Avgas 100L or 100LL

See also Flight Manual (see Section 2.IV.)

8.2. Oil

Refer to Flight Manual (see Section 2.IV.)

9. Fluid capacities

9.1. Fuel

Main Tanks (Total):		
Total:	136.8 US Gallons	(518 litres)
Usable:	129.8 US Gallons	(491 litres)
Tip Tanks (Total):		
Total:	59.2 US Gallons	(224 litres)
Usable:	55.2 US Gallons	(209 litres)

9.2. Oil (per engine)

Maximum Oil Capacity:	12 US quarts	(11.3 litres)
Minimum Safe Oil Level:	2.75 US quarts	(2.6 litres)

10. Air Speeds

Never Exceed Speed, V_{NE}:	195 KIAS (188 KEAS)
Normal Operating Limit Speed, V_{NO}:	152 KIAS (149 KEAS)
Manoeuvring Speed, V_A:	130 KIAS (128 KEAS)
Flaps, Take-off, V_F:	113 KIAS (113 KEAS)
Flaps, Landing, V_F:	106 KIAS (108 KEAS)
Minimum Control Speed, V_{MC}:	50 KIAS

11. Flight Envelope

Maximum operating altitude 10000ft

Refer to Flight Manual (see Section 2.IV.)

12. Approved Operations Capability

Refer to applicable Flight Manual and supplements (see Section 2.IV.)

Section 2: BN.2A MARK III, continued

13. Maximum Masses

Take-off:	9350 lb (4241 kg)
Landing:	9350 lb (4241 kg)
Wing Zero Fuel:	9050 lb (4105 kg)

14. Centre of Gravity Range

Forward limit:

+20.0 in at weights up to 8750 lb, then varying linearly to +21.0 in at 9350 lb.

Aft limit:

+25.6 in at all weights.

15. Datum

Coincident with wing leading edge (STN 234.5)

16. Control Surface Deflections

Aircraft rigged in accordance with Trislander Maintenance Manual MM/2

17. Levelling Means

17.1. Fore and Aft

Holes for datum pins on which straight edge is placed are located on the left side of the centre fuselage.

17.2. Lateral

By lateral levelling marks located on the upper wing surface on the main spar.

18. Minimum Flight Crew

1 (Pilot)

19. Maximum Passenger Seating Capacity

17

20. Baggage/ Cargo Compartments

20.1. Main Compartment

Maximum intensity is 120 lb/sq.ft., but the total load forward of the front spar frame shall not exceed 1500 lb, and the total load aft of the rear spar frame shall not exceed 1000 lb. Between spar frames, the maximum load shall not exceed 820 lb.

20.2. Rear Baggage Platform

Maximum intensity is 120 lb/sq.ft., but the total load shall not exceed 400 lb.

21. Wheels and Tyres

Nose Wheel Tyre Size:	One: 6.00 x 6
Main Wheel Tyre Size:	Four: 7.00 x 6

Section 2: BN.2A MARK III, continued

IV. Operating and Service Instructions

1. Flight Manual

The limitations, recommended procedures and information required are contained in the approved Flight Manuals, (Britten-Norman Limited Document FM/BN2AIII/1), with the following dates of approval and Revision (R) / Deviation (D) standards:

Approved by ARB on 6th May 1971. (R1, D4, D5, D13, R2, R3, D20)

2. Maintenance Manual

Document No. MM/2

3. Maintenance Schedule

Document No. MS/2

4. Structural Repair Manual

Document No. PC-A/ASRP

5. Weight and Balance Manual

Refer to Flight Manual

6. Illustrated Parts Catalogue

Document No. PC/2

V. Operational Suitability Data

1. Master Minimum Equipment List

Document No. MMEL/2

2. Dispatch Deviation Guide

Document No. DDG/2

VI. Notes

None.

Section 3 BN2.2A MARK III-1

I. General

1. Type / Variant or Model

a) Type: BN2A Mark III Trislander Series Aircraft

b) Model: BN.2A MARK III-1[Note A]

c) Variant: N/A

2. Airworthiness Category

Part 23, Normal Category (see Section 1.II.2)

3. Manufacturer

Britten-Norman Aerospace Ltd

Bembridge Airport
Bembridge
Isle of Wight PO35 5PR
UK

4. State of Design Authority

United Kingdom CAA

5. State of Design Authority Type Certificate Date

BN.2A MARK III-1 (Interim)[Note A]	16 July 1974
BN.2A MARK III-1	08 December 1974

6. Original UK CAA TCDS Number

BA6

Section 3: BN.2A MARK III-1, continued

II. Certification Basis

1. Reference Date for determining the applicable requirements

18 December 1970

2. Airworthiness Requirements

The following requirements were the basis of certification for the type design:

BCAR Section K – Light Aeroplanes – Issue 3, dated 1 October 1969.

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

BCAR Blue Papers:

377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
402, 24 September 1969 and is amended by ARB letter reference REQ/IBL dated 25 September 1970: Flight Manuals for Light Aeroplanes
497, 18 September 1969: Miscellaneous Amendments to Handling Requirements – First Set
503, 18 September 1969: Miscellaneous Amendments to Handling Requirements – Second Set

3. Special Conditions

CAA Special Conditions relating to the structure in document A48T.312/347 dated 26 October 1970, transmitted by ARB letter reference ABN 208 dated 18 December 1970.

CAA Special Condition relating to power failure warning for the rear engine contained in ARB letter reference DES/ABN208 dated 8 June 1971.

NOTE: For compliance with these special conditions modification NB-M-502 is included in the type design.

4. Exemptions

Non-compliance with the following requirements was accepted:

BCAR Section K – Light Aeroplanes Issue 3

Chapter K4-4, paragraph 2.3.4
Chapter K7-2, paragraph 2.5(a)(i)

5. Deviations

None

6. Equivalent Safety Findings

None

7. Environmental Protection

ICAO Annex 16 Volume I

(see TCDSN UK.TC.A.00043 for for details)

8. Operational Suitability Certification Basis

MMEL: CS-MMEL, Initial Issue

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

BN.2A MARK III-1 (Interim) Note A	NB-M-614
BN.2A MARK III-1	NB-M-602

2. Description

Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).

3. Equipment

Document No. MMEL/2

4. Dimensions

Span	53 ft	0 in	(16.15 m)
Length	45 ft	8.5 in	(13.93 m)
Height	14 ft	2 in	(4.32 m)
Wing Area	337.0 sq ft		(31.31 m²)

5. Engine

5.1. Model

3 Avco Lycoming O-540-E4C5

5.2. Type Certificate

FAA E-295

5.3. Limitations

For all operation 2700 RPM (260hp)

6. Load factors

	Flap UP/TO	Flap DOWN
Positive	+3.30g	+2.0g
Negative	-1.32g	-0g

7. Propeller

One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix …-4 or 78 inch diameter as indicated by suffix …-6) types fitted to each engine:

7.1. Model

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

7.2. Type Certificate

EASA.IM.P.130

Section 3: BN.2A MARK III-1, continued

7.3. Number of blades

2

7.4. Diameter

80 inch diameter as indicated by suffix …-4 or

78 inch diameter as indicated by suffix …-6

7.5. Sense of Rotation

Clockwise (pilot's view)

8. Fluids

8.1. Fuel

91/96 octane (minimum) Avgas 100L or 100LL

(Refer also to Flight Manual, see Section 3.IV.)

8.2. Oil

Refer to Flight Manual (see Section 3.IV.)

9. Fluid capacities

9.1. Fuel

Main Tanks (Total):		
Total:	136.8 US Gallons	(518 litres)
Usable:	129.8 US Gallons	(491 litres)
Tip Tanks (Total):		
Total:	59.2 US Gallons	(224 litres)
Usable:	55.2 US Gallons	(209 litres)

9.2. Oil (per engine)

Maximum Oil Capacity:	12 US quarts	(11.3 litres)
Minimum Safe Oil Level:	2.75 US quarts	(2.6 litres)

10. Air Speeds

Never Exceed Speed, V_{NE}:	182 KIAS (176 KEAS)
Normal Operating Limit Speed, V_{NO}:	142 KIAS (140 KEAS)
Manoeuvring Speed, V_A:	133 KIAS (132 KEAS)
Flaps, Take-off, V_F:	133 KIAS (130 KEAS)
Flaps, Landing, V_F:	110 KIAS (112 KEAS)
Minimum Control Speed, V_{MC}:	50 KIAS

11. Flight Envelope

Maximum operating altitude 10000ft
Refer to Flight Manual (see Section 3.IV.)

12. Approved Operations Capability

Refer to applicable Flight Manual and supplements (see section 3.IV.)

Section 3: BN.2A MARK III-1, continued

13. Maximum Masses

	BN.2A MARK III-1 (Interim)[Note A]		BN.2A MARK III-1	
Take-off	9825 lb	(4457 kg)	10000 lb	(4536 kg)
Landing	9350 lb	(4241 kg)	10000 lb	(4536 kg)
Wing Zero Fuel	9350 lb	(4241 kg)	9700 lb	(4400 kg)

14. Centre of Gravity Range

	Forward Limit	Aft Limit
BN.2A MARK III-1 (Interim) [Note A]	+20.0 in at weights up to 8750 lb, then varying linearly to +21.0 in at 9350 lb, with a further linear variation from this position to +22.5 in at 9825 lb	+25.6 in at all weights
BN.2A MARK III-1	+20.0 in at weights up to 8750 lb, then varying linearly to +21.0 in at 9350 lb, with a further linear variation from this position to +23.0 in at 10000 lb	+25.6 in at all weights

15. Datum

Coincident with wing leading edge (STN 234.5)

16. Control Surface Deflections

Aircraft rigged in accordance with Trislander Maintenance Manual MM/2

17. Levelling Means

17.1. Fore and Aft

Holes for datum pins on which straight edge is placed are located on the left side of the centre fuselage.

17.2. Lateral

By lateral levelling marks located on the upper wing surface on the main spar.

18. Minimum Flight Crew

1 (Pilot)

19. Maximum Passenger Seating Capacity

17

20. Baggage/ Cargo Compartments

20.1. Main Compartment

Maximum intensity is 120 lb/sq.ft., but the total load forward of the front spar frame shall not exceed 1500 lb, and the total load aft of the rear spar frame shall not exceed 1000 lb. Between spar frames, the maximum load shall not exceed 820 lb.
Between the rear of the pilot's seat and the front spar frame, the load per foot run shall not exceed 130lb. per foot run.
Between the rear spar frame and the baggagecompartment, the load per foot run shall not exceed 150 lb. per foot run.

20.2. Rear Baggage Platform

Maximum intensity is 120 lb/sq.ft., but the total load shall not exceed 400 lb

21. Wheels and Tyres

	BN.2A MARK III-1 (Interim) Note A	BN.2A MARK III-1
Nose Wheel Tyre Size	One: 6.00 x 6	One: 6.00 x 6
Main Wheel Tyre Size	Four: 7.00 x 6	Four: 6.50 x 8

IV. Operating and Service Instructions

1. Flight Manual

The limitations, recommended procedures and information required are contained in the approved Flight Manuals, (Britten-Norman Limited Document FM/BN2AIII/1), with the following dates of approval and Revision (R) / Deviation (D) standards:

Approved by ARB on 6th May 1971. (R1, D4, D5, D7, D8, D11, R2, R3)

For the interim version (non-embodiment of modification NB-M-579, but embodying modification NB-M-614), the addition of Supplement 9

2. Maintenance Manual

Document No. MM/2

3. Maintenance Schedule

Document No. MS/2

4. Structural Repair Manual

Document No. PC-A/ASRP

5. Weight and Balance Manual

Refer to Flight Manual

6. Illustrated Parts Catalogue

Document No. PC/2

V. Operational Suitability Data

1. Master Minimum Equipment List

Document No. MMEL/2

2. Dispatch Deviation Guide

Document No. DDG/2

VI. Notes

Note A:

The model BN.2A MARK III-1 includes an interim version not embodying Britten-Norman Ltd modification NB-M-579 (strengthened main undercarriage tubes and higher capacity wheel brakes), but embodying Britten-Norman Ltd modification NB-M-614.

Section 4 BN.2A MARK III-2

I. General

1. Type / Variant or Model

a) Type: BN2A Mark III Trislander Series Aircraft

b) Model: BN.2A MARK III-2

c) Variant: N/A

2. Airworthiness Category

Part 23, Normal Category (see Section 1.II.2)

3. Manufacturer

Britten-Norman Aerospace Ltd

Bembridge Airport
Bembridge
Isle of Wight PO35 5PR
UK

4. State of Design Authority

United Kingdom CAA

5. State of Design Authority Type Certificate Date

04 March 1975

6. Original UK CAA TCDS Number

BA6

II. Certification Basis

1. Reference Date for determining the applicable requirements

18 December 1970

2. Airworthiness Requirements

The following requirements were the basis of certification for the type design:

BCAR Section K – Light Aeroplanes – Issue 3, dated 1 October 1969.

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

BCAR Blue Papers:

377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
402, 24 September 1969 and is amended by ARB letter reference REQ/IBL dated 25 September 1970: Flight Manuals for Light Aeroplanes
497, 18 September 1969: Miscellaneous Amendments to Handling Requirements – First Set
503, 18 September 1969: Miscellaneous Amendments to Handling Requirements – Second Set

3. Special Conditions

CAA Special Conditions relating to the structure in document A48T.312/347 dated 26 October 1970, transmitted by ARB letter reference ABN 208 dated 18 December 1970.

CAA Special Condition relating to power failure warning for the rear engine contained in ARB letter reference DES/ABN208 dated 8 June 1971.

NOTE: For compliance with these special conditions modification NB-M-502 is included in the type design.

4. Exemptions

Non-compliance with the following requirements was accepted:

BCAR Section K – Light Aeroplanes Issue 3

Chapter K4-4, paragraph 2.3.4
Chapter K7-2, paragraph 2.5(a)(i)

5. Deviations

None

6. Equivalent Safety Findings

None

7. Environmental Protection

ICAO Annex 16 Volume I
(see TCDSN UK.TC.A.00043 for for details)

8. Operational Suitability Certification Basis

MMEL: CS-MMEL, Initial Issue

III. Technical Characteristics and Operating Limitations

1. Type Design Definition

NB-M-610

2. Description

Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).

3. Equipment

Document No. MMEL/2

4. Dimensions

Span	53 ft	0 in	(16.15 m)
Length	49 ft	2.63 in	(15.01m)
Height	14 ft	2 in	(4.32 m)
Wing Area	337.0 sq ft		(31.31 m²)

5. Engine

5.1. Model

3 Avco Lycoming O-540-E4C5

5.2. Type Certificate

FAA E-295

5.3. Limitations

For all operation 2700 RPM (260hp)

6. Load factors

	Flap UP	Flap DOWN
Positive	+3.30g	+2.0g
Negative	-1.32g	-0g

7. Propeller

One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix …-4 or 78 inch diameter as indicated by suffix …-6) types fitted to each engine:

7.1. Model

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

7.2. Type Certificate

EASA.IM.P.130

7.3. Number of blades

2

7.4. Diameter

80 inch diameter as indicated by suffix …-4 or

78 inch diameter as indicated by suffix …-6

7.5. Sense of Rotation

Clockwise (pilot's view)

8. Fluids

8.1. Fuel

91/96 octane (minimum) Avgas 100L or 100LL

(Refer also to Flight Manual, see Section 4.IV.)

8.2. Oil

Refer to Flight Manual (see Section 4.IV.)

9. Fluid capacities

9.1. Fuel

Main Tanks (Total):		
Total:	136.8 US Gallons	(518 litres)
Usable:	129.8 US Gallons	(491 litres)
Tip Tanks (Total):		
Total:	59.2 US Gallons	(224 litres)
Usable:	55.2 US Gallons	(209 litres)

9.2. Oil

Maximum Oil Capacity:	12 US quarts	(11.3 litres)
Minimum Safe Oil Level:	2.75 US quarts	(2.6 litres)

10. Air Speeds

Never Exceed Speed, V_{NE}:	182 KIAS (182 KEAS)
Normal Operating Limit Speed, V_{NO}:	142 KIAS (140 KEAS)
Manoeuvring Speed, V_A:	133 KIAS (132 KEAS)
Flaps, Take-off, V_F:	133 KIAS (130 KEAS)
Flaps, Landing, V_F:	110 KIAS (112 KEAS)
Minimum Control Speed, V_{MC}:	50 KIAS

11. Flight Envelope

Maximum operating altitude 10000ft

Refer to Flight Manual (see Section 4.IV.)

12. Approved Operations Capability

Refer to applicable Flight Manual and supplements (see Section 4.IV.)

13. Maximum Masses

Take-off:	10000 lb (4536 kg)
Landing:	10000 lb (4536 kg)
Wing Zero Fuel:	9700 lb (4400 kg)

Section 4: BN.2A MARK III-2, continued

14. Centre of Gravity Range

Forward limit:

+19.0 in at weights up to 8750 lb, then varying linearly to +20.0 in at 10000 lb.

Aft limit:

+25.6 in at weights up to 8750 lb, then varying linearly to +24.5 in at 10000 lb.

15. Datum

Coincident with wing leading edge (STN 234.5)

16. Control Surface Deflections

Aircraft rigged in accordance with Trislander Maintenance Manual MM/2

17. Levelling Means

17.1. Fore and Aft

Holes for datum pins on which straight edge is placed are located on the left side of the centre fuselage.

17.2. Lateral

By lateral levelling marks located on the upper wing surface on the main spar.

18. Minimum Flight Crew

1 (Pilot)

19. Maximum Passenger Seating Capacity

17

20. Baggage/ Cargo Compartments

20.1. Main Compartment

Maximum intensity is 120 lb/sq.ft., but the total load forward of the front spar frame shall not exceed 1500 lb, and the total load aft of the rear spar frame shall not exceed 1000 lb. Between spar frames, the maximum load shall not exceed 820 lb.

Between the rear of the pilot's seat and the front spar frame, the load per foot run shall not exceed 130lb. per foot run.

Between the rear spar frame and the baggage compartment, the load per foot run shall not exceed 150 lb. per foot run.

20.2. Rear Baggage Platform

Maximum intensity is 120 lb/sq.ft., but the total load shall not exceed 400 lb

20.3. Forward Baggage Bay

Maximum intensity is 120 lb/sq.ft., but the total load shall not exceed 300 lb

21. Wheels and Tyres

Nose Wheel Tyre Size:	One: 6.00 x 6
Main Wheel Tyre Size:	Four: 6.50 x 8

IV. Operating and Service Instructions

1. Flight Manual

The limitations, recommended procedures and information required are contained in the approved Flight Manuals, (Britten-Norman Limited Document FM/BN2AIII/1), with the following dates of approval and Revision (R) / Deviation (D) standards:

Approved by ARB on 6th May 1971. (R1, D4, D5, D7, D8, D10, D12, D14, R2, R3, D21)

2. Maintenance Manual

Document No. MM/2

3. Maintenance Schedule

Document No. MS/2

4. Structural Repair Manual

Document No. PC-A/ASRP

5. Weight and Balance Manual

Refer to Flight Manual

6. Illustrated Parts Catalogue

Document No. PC/2

V. Operational Suitability Data

1. Master Minimum Equipment List

Document No. MMEL/2

2. Dispatch Deviation Guide

Document No. DDG/2

VI. Notes

None.

Section 5 BN.2A MARK III-3

I. General

1. Type / Variant or Model

a) Type: BN2A Mark III Trislander Series Aircraft

b) Model: BN.2A Mark III-3

c) Variant: N/A

2. Airworthiness Category

Part 23, Normal Category (see Section 1.II.2)

3. Manufacturer

Britten-Norman Aerospace Ltd

Bembridge Airport
Bembridge
Isle of Wight PO35 5PR
UK

4. State of Design Authority

United Kingdom CAA

5. State of Design Authority Type Certificate Date

09 December 1976

6. Original UK CAA TCDS Number

BA6

Section 5: BN.2A MARK III-3, continued

II. Certification Basis

1. Reference Date for determining the applicable requirements

18 December 1970

2. Airworthiness Requirements

The following requirements were the basis of certification for the type design:

BCAR Section K – Light Aeroplanes – Issue 3, dated 1 October 1969.

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

BCAR Blue Papers:

377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
402, 24 September 1969 and is amended by ARB letter reference REQ/IBL dated 25 September 1970: Flight Manuals for Light Aeroplanes
497, 18 September 1969: Miscellaneous Amendments to Handling Requirements – First Set
503, 18 September 1969: Miscellaneous Amendments to Handling Requirements – Second Set

3. Special Conditions

CAA Special Conditions relating to the structure in document A48T.312/347 dated 26 October 1970, transmitted by ARB letter reference ABN 208 dated 18 December 1970.

CAA Special Condition relating to power failure warning for the rear engine contained in ARB letter reference DES/ABN208 dated 8 June 1971.

NOTE: For compliance with these special conditions modification NB-M-502 is included in the type design.

4. Exemptions

Non-compliance with the following requirements was accepted:

BCAR Section K – Light Aeroplanes Issue 3

Chapter K4-4, paragraph 2.3.4

Chapter K7-2, paragraph 2.5(a)(i)

5. Deviations

None

6. Equivalent Safety Findings

None

7. Environmental Protection

ICAO Annex 16 Volume I

(see TCDSN UK.TC.A.00043 for for details)

8. Operational Suitability Certification Basis

MMEL: CS-MMEL, Initial Issue

Section 5: BN.2A MARK III-3, continued

III. Technical Characteristics and Operating Limitations

1. Type Design Definition

NB-M-881

2. Description

Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).

3. Equipment

Document No. MMEL/2

4. Dimensions

Span	53 ft	0 in	(16.15 m)
Length	49 ft	2.63 in	(15.01m)
Height	14 ft	2 in	(4.32 m)
Wing Area	337.0 sq ft		(31.31 m²)

5. Engine

5.1. Model

3 Avco Lycoming O-540-E4C5

5.2. Type Certificate

FAA E-295

5.3. Limitations

For all operation 2700 RPM (260hp)

6. Load factors

	Flap UP	Flap DOWN
Positive	+3.30g	+2.0g
Negative	-1.32g	-0g

7. Propeller

One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix …-4 or 78 inch diameter as indicated by suffix …-6) types fitted to each engine:

7.1. Model

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

7.2. Type Certificate

EASA.IM.P.130

7.3. Number of blades

2

Section 5: BN.2A MARK III-3, continued

7.4. Diameter

80 inch diameter as indicated by suffix …-4 or

78 inch diameter as indicated by suffix …-6

7.5. Sense of Rotation

Clockwise (pilot's view)

8. Fluids

8.1. Fuel

91/96 octane (minimum) Avgas 100L or 100LL

(Refer also to Flight Manual, see section 5.IV.)

8.2. Oil

Refer to Flight Manual (see Section 5.IV.)

9. Fluid capacities

9.1. Fuel

Main Tanks (Total):		
Total:	136.8 US Gallons	(518 litres)
Usable:	129.8 US Gallons	(491 litres)
Tip Tanks (Total):		
Total:	59.2 US Gallons	(224 litres)
Usable:	55.2 US Gallons	(209 litres)

9.2. Oil (per engine)

Maximum Oil Capacity:	12 US quarts	(11.3 litres)
Minimum Safe Oil Level:	2.75 US quarts	(2.6 litres)

10. Air Speeds

Never Exceed Speed, V_{NE}:	182 KIAS (182 KEAS)
Normal Operating Limit Speed, V_{NO}:	142 KIAS (140 KEAS)
Manoeuvring Speed, V_A:	133 KIAS (132 KEAS)
Flaps, Take-off, V_F:	133 KIAS (130 KEAS)
Flaps, Landing, V_F:	110 KIAS (112 KEAS)
Minimum Control Speed, V_{MC}:	50 KIAS

11. Flight Envelope

Maximum operating altitude 10000ft

Refer to Flight Manual (see Section 5.IV.)

12. Approved Operations Capability

Refer to applicable Flight Manual and supplements (see Section 5.IV.)

13. Maximum Masses

Take-off:	10000 lb (4536 kg)
Landing:	10000 lb (4536 kg)
Wing Zero Fuel:	9700 lb (4400 kg)

Section 5: BN.2A MARK III-3, continued

14. Centre of Gravity Range

Forward limit:

+19.0 in at weights up to 8750 lb, then varying linearly to +20.0 in at 10000 lb.

Aft limit:

+25.6 in at weights up to 8750 lb, then varying linearly to +24.5 in at 10000 lb.

15. Datum

Coincident with wing leading edge (STN 234.5)

16. Control Surface Deflections

Aircraft rigged in accordance with Trislander Maintenance Manual MM/2

17. Levelling Means

17.1. Fore and Aft

Holes for datum pins on which straight edge is placed are located on the left side of the centre fuselage.

17.2. Lateral

By lateral levelling marks located on the upper wing surface on the main spar.

18. Minimum Flight Crew

1 (Pilot)

19. Maximum Passenger Seating Capacity

17

20. Baggage/ Cargo Compartments

20.1. Main Compartment

Maximum intensity is 120 lb/sq.ft., but the total load forward of the front spar frame shall not exceed 1500 lb, and the total load aft of the rear spar frame shall not exceed 1000 lb. Between spar frames, the maximum load shall not exceed 820 lb.

Between the rear of the pilot's seat and the front spar frame, the load per foot run shall not exceed 130lb. per foot run.

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20.2. Rear Baggage Platform

Maximum intensity is 120 lb/sq.ft., but the total load shall not exceed 400 lb.

20.3. Forward Baggage Bay

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21. Wheels and Tyres

Nose Wheel Tyre Size:	One: 6.00 x 6
Main Wheel Tyre Size:	Four: 6.50 x 8

Section 5: BN.2A MARK III-3, continued

IV. Operating and Service Instructions

1. Flight Manual

The limitations, recommended procedures and information required are contained in the approved Flight Manuals, (Britten-Norman Limited Document FM/BN2AIII/1), with the following dates of approval and Revision (R) / Deviation (D) standards:
Approved by ARB on 6th May 1971. (R1, D4, D5, D7, D8, D10, D12, D14, R2, D18, R3, D22)

2. Maintenance Manual

Document No. MM/2

3. Maintenance Schedule

Document No. MS/2

4. Structural Repair Manual

Document No. PC-A/ASRP

5. Weight and Balance Manual

Refer to Flight Manual

6. Illustrated Parts Catalogue

Document No. PC/2

V. Operational Suitability Data

1. Master Minimum Equipment List

Document No. MMEL/2

2. Dispatch Deviation Guide

Document No. DDG/2

VI. Notes

None.

Section 6 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
AAN	Airworthiness Approval Note
ARB	Air Registration Board (predecessor of UK CAA)
BCAR	British Civil Airworthiness Requirements
CAA	Civil Aviation Authority (UK)
CS	Certification Specification
DDG	Dispatch Deviation Guide
EASA	European Union Aviation Safety Agency
EFIS	Electronic Flight Instrument System
EU	European Union
FAA	Federal Aviation Administration
FM	Flight Manual
hp	Horsepower
ICAO	International Civil Aviation Organization
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
KEAS	Knots, Equivalent Airspeed
KIAS	Knots, Indicated Airspeed
MMEL	Master Minimum Equipment List
RPM	Revolutions Per Minute
s/n	Serial Number
SB	Service Bulletin
STN	Station (distance from horizontal fuselage datum)
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
UK	United Kingdom of Great Britain and Northern Ireland

Section 7: Administration, continued

II. Type Certificate Holder Record

TCH Record	Period
Britten-Norman Aerospace Ltd Commodore House Mountbatten Business Centre Millbrook Road East Southampton SO15 1HY United Kingdom	Present
Britten-Norman Aircraft Ltd Commodore House Mountbatten Business Centre Millbrook Road East Southampton SO15 1HY United Kingdom	Until 15 March 2024

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	05 Sep 2022	The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS.A.389 at Issue 1 dated 23 November 2020 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the BN2 Islander Series Aircraft accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement, except as listed below: • Front Page, Section 2.I.1.a), Section 3.I.1.a), Section 4.I.1.a) and Section 5.I.1.a) revised to add 'Series Aircraft' to aircraft type • Section 1 General added to provide explanatory notes and history of previous TCDS. • TC Holder and Manufacturer addresses updated (Front page, and Sections 2.I.3, 3.I.3, 4.I.3, 5.I.3,) • Section 2.I.3, Section 3.I.3, Section 4.I.3 and Section 5.I.3 revised with MMEL/2 reference. • Obsolete information relating to EASA Type Certification dates removed from Sections 2.I., 3.I., 4.I., 5.I. • Section 6 Administration – Acronym and Abbreviation Table updated. • Formatting updated and cross references to section numbers updated due to introduction of Section 1.	Issue 1 05 Sep 2022
2	15 March 2024	Type certificate transferred from Britten-Norman Aircraft Ltd (UK.21J.0138) to Britten-Norman Aerospace Ltd (UK.21J.1019). Section 1.II.1 amended to reflect transfer.	Issue 2 15 March 2024

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