TYPE-CERTIFICATE

DATA SHEET

No. EASA.IM.A.389

for
BN2A Mark III Trislander

Type Certificate Holder
Britten-Norman Aerospace Ltd

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

For models: BN.2A MARK III
BN.2A MARK III-1
BN.2A MARK III -2
BN.2A MARK III -3

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CONTENT

SECTION A: BN.2A MARK III

A.I. General

1.	Type/ Model	
	1.1 Type	BN2A Mark III Trislander
	1.2 Model	BN.2A MARK III
2.	Airworthiness Category	Part 23, Normal Category (see section E.I. Note 1)
3.	Manufacturer	Britten-Norman Aircraft Ltd Bembridge Airport PO35 5PR Bembridge Isle of Wight, UK
4.	EASA Type Certification Application Date	N/A
5.	State of Design Authority	United Kingdom CAA
6.	State of Design Authority Type Certificate Date	21-05-1971
7.	EASA Type Certification Date	See section E.I. Note 2
8.	UK C.A.A. T.C.D.S. Number	BA6

A.II. EASA 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 this 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.	(Reserved) Deviations	None
6.	Equivalent Safety Findings	None
7.	Environmental Protection	ICAO Annex 16 Volume I (see EASA TCDSN.A.389 for details)
8.	Operational Suitability Certification Basis	MMEL: CS-MMEL, Initial Issue

A.III. Technical Characteristics and Operational 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: Refer to Flight Manual (see section A.IV.)

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
(Refer also to Flight Manual (see section A.IV.))

8.2. Oil: Refer to Flight Manual (see section A.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 A.IV.)		
12. Approved Operations Capability	Refer to applicable Flight Manual and supplements (see section A.IV.)		
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	
22. (Reserved)			

A.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

A.V. Operational Suitability Data

1.	Master Minimum Equipment List	Document No. MMEL/2
2.	Dispatch Deviation Guide	Document No. DDG/2

A.VI. Notes

None.

SECTION B: BN.2A MARK III-1

B.I. General

1.	Type/ Model/ Variant		
	1.1 Type	BN2A Mark III Trislander	
	1.2 Model	BN.2A MARK III-1 note a	
2.	Airworthiness Category	Part 23, Normal Category (see section E.I. Note 1)	
3.	Manufacturer	Britten-Norman Aircraft Ltd Bembridge Airport PO35 5PR Bembridge Isle of Wight, UK	
4.	EASA Type Certification Application Date	N/A	
5.	State of Design Authority	United Kingdom CAA	
6.	State of Design Authority Type Certificate Date	BN.2A MARK III-1 (Interim) note a BN.2A MARK III-1	16-07-1974 08-12-1974
7.	EASA Type Certification Date	See section E.I. Note 2	
8.	UK C.A.A. T.C.D.S. Number	BA6	

B.II. EASA 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 this 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.	(Reserved) Deviations	None
6.	Equivalent Safety Findings	None
7.	Environmental Protection	ICAO Annex 16 Volume I (see EASA TCDSN.A.389 for details)
8.	Operational Suitability Certification Basis	MMEL: CS-MMEL, Initial Issue

B.III. Technical Characteristics and Operational 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	Refer to Flight Manual (see section B.IV.)		
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	
	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 B.IV.))	
	8.2. Oil	Refer to Flight Manual (see section B.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 B.IV.)		
12. Approved Operations Capability	Refer to applicable Flight Manual and supplements (see section B.IV.)		

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 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.

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

22. (Reserved)

B.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

B.V. Operational Suitability Data

1.	Master Minimum Equipment List	Document No. MMEL/2
2.	Dispatch Deviation Guide	Document No. DDG/2

B.VI. Notes

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 C: BN.2A MARK III-2

C.I. General

1.	Type/ Model/ Variant	
	1.1 Type	BN2A Mark III Trislander
	1.2 Model	BN.2A MARK III-2
2.	Airworthiness Category	Part 23, Normal Category (see section E.I. Note 1)
3.	Manufacturer	Britten-Norman Aircraft Ltd Bembridge Airport PO35 5PR Bembridge Isle of Wight, UK
4.	EASA Type Certification Application Date	N/A
5.	State of Design Authority	United Kingdom CAA
6.	State of Design Authority Type Certificate Date	04-03-1975
7.	EASA Type Certification Date	See section E.I. Note 2
8.	UK C.A.A. T.C.D.S. Number	BA6

C.II. EASA 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 this 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.	(Reserved) Deviations	None
6.	Equivalent Safety Findings	None
7.	Environmental Protection	ICAO Annex 16 Volume I (see EASA TCDSN.A.389 for details)
8.	Operational Suitability Certification Basis	MMEL: CS-MMEL, Initial Issue

C.III. Technical Characteristics and Operational 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: Refer to Flight Manual (see section C.IV.)

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 / 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

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 C.IV.))

8.2. Oil: Refer to Flight Manual (see section C.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 C.IV.)		
12. Approved Operations Capability	Refer to applicable Flight Manual and supplements (see. section C.IV.)		
13. Maximum Masses	Take-off:	10000 lb	(4536 kg)
	Landing:	10000 lb	(4536 kg)
	Wing Zero Fuel:	9700 lb	(4400 kg)
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

22. (Reserved)

C.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

C.V. Operational Suitability Data

1.	Master Minimum Equipment List	Document No. MMEL/2
2.	Dispatch Deviation Guide	Document No. DDG/2

C.VI. Notes

None.

SECTION D: BN.2A MARK III-3

D.I. General

1.	Type/ Model/ Variant	
	1.1 Type	BN2A Mark III Trislander
	1.2 Model	BN.2A MARK III-3
2.	Airworthiness Category	Part 23, Normal Category (see section E.I. Note 1)
3.	Manufacturer	Britten-Norman Aircraft Ltd Bembridge Airport PO35 5PR Bembridge Isle of Wight, UK
4.	EASA Type Certification Application Date	N/A
5.	State of Design Authority	United Kingdom CAA
6.	State of Design Authority Type Certificate Date	09-12-1976
7.	EASA Type Certification Date	See section E.I. Note 2
8.	UK C.A.A. T.C.D.S. Number	BA6

D.II. EASA 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 this 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.	(Reserved) Deviations	None
6.	Equivalent Safety Findings	None
7.	Environmental Protection	ICAO Annex 16 Volume I (see EASA TCDSN.A.389 for details)
8.	Operational Suitability Certification Basis	MMEL: CS-MMEL, Initial Issue

D.III. Technical Characteristics and Operational 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: Refer to Flight Manual (see section D.IV.)

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 / 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

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 D.IV.))

8.2. Oil: Refer to Flight Manual (see section D.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 D.IV.)		
12. Approved Operations Capability	Refer to applicable Flight Manual and supplements (see section D.IV.)		
13. Maximum Masses	Take-off:	10000 lb	(4536 kg)
	Landing:	10000 lb	(4536 kg)
	Wing Zero Fuel:	9700 lb	(4400 kg)
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

22. (Reserved)

D.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

D.V. Operational Suitability Data

1.	Master Minimum Equipment List	Document No. MMEL/2
2.	Dispatch Deviation Guide	Document No. DDG/2

D.VI. Notes

None.

SECTION E: DATA PERTINENT TO ALL MODELS

E.I. Notes

Note 1: This EASA TCDS is based on the original UK C.A.A. T.C.D.S. BA6 Issue 7. The mentioned models and variants were transferred to EASA under the provisions of Commission Regulation 1702/2003.

Note 2: The original CAA UK TCDS BA6 used the term "Certification Category" for operational classifications against British rules as follows: Transport Category (Passenger).

Note 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.

Note 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).

Note 5: 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 corresponding UK TCDS is UK.TC.A.00043

Note 6: 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.

Note 7: To reflect the new status of imported product following the UK withdrawal from the European Union on 31 January 2020, the prefix “IM” for “imported” has been integrated in the TCDS number.

SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

BCAR	British Civil Airworthiness Requirements
CAA	Civil Aviation Authority (UK)
ICAO	International Civil Aviation Organisation
JAR	Joint Aviation Requirements
TCDS	Type Certificate Datasheet
TCDSN	Type Certificate Datasheet for Noise

II. Type Certificate Holder Record

Britten-Norman Aerospace Ltd
Commodore House,
Mountbatten Business Centre
Millbrook Road East
Southampton
SO15 1HY
United Kingdom

Britten-Norman Aircraft Ltd
Bembridge Airport
PO35 5PR Bembridge
Isle of Wight, UK

BN Group Limited
The Airport,
Bembridge,
Isle of Wight
PO35 5PR

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
01	23 Nov. 2020	Initial Issue of the EASA TCDS derived from the UK TCDS no. BA6	23 Nov. 2020
02	05 August 2024	Cover page – TCH changed. Section E – note 5 and 6 introduced. Section Administrative – TCH record updated.	05 Aug 2024
03	17 Feb. 2025	Prefix “IM” for “imported” integrated in the TCDS number and Note 7 added in section E. TC reissued.	17 Feb. 2025

-END-