



TYPE-CERTIFICATE DATA SHEET

No. EASA.A.389

for

BN2A Mark III Trislander

Type Certificate Holder

Britten-Norman Aircraft Ltd

Bembridge Airport,
PO35 5PR Bembridge
Isle of Wight, United Kingdom

For models: BN.2A MARKIII
BN.2A MARKIII-1
BN.2A MARKIII -2
BN.2A MARKIII -3



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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 m ²)
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_{FL} :	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} BN.2A MARK III-1	NB-M-614 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 m ²)
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 MARKIII-1 (Interim) ^{note a}		BN.2A MARKIII-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 MARKIII-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 MARKIII-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 m ²)
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_{FL} : | 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 m ²)
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_L} : | 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).



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 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

-END-

