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 Blue Papers:
     - 377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
     - 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 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  
<table>
<thead>
<tr>
<th>Span</th>
<th>Length</th>
<th>Height</th>
<th>Wing Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>53 ft 0 in</td>
<td>45 ft 8.5 in</td>
<td>14 ft 2 in</td>
<td>337.0 sq ft</td>
</tr>
</tbody>
</table>

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/FC8477-4 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, $V_L$: 106 KIAS (108 KEAS)
- Minimum Control Speed, $V_{MC}$: 50 KIAS

11. Flight Envelope

- Maximum operating altitude 10000 ft

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**
3. **Maintenance Schedule**
4. **Structural Repair Manual**
5. **Weight and Balance Manual**
6. **Illustrated Parts Catalogue**

A.V. **Operational Suitability Data**

1. **Master Minimum Equipment List**
2. **Dispatch Deviation Guide**

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<sup>Note a</sup>

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)<sup>Note a</sup>
   16-07-1974
   BN.2A MARK III-1
   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 Blue Papers:
   
   377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
   
   
   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 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-2CFU/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, \( V_L \): 110 KIAS (112 KEAS)  
Minimum Control Speed, \( V_{MC} \): 50 KIAS

11. Flight Envelope  
Maximum operating altitude 10000ft  
Refer to Flight Manual (see section B.IV.)

12. Approved Operations Capability  
Refer to applicable Flight Manual and supplements (see section B.IV.)

13. Maximum Masses  

<table>
<thead>
<tr>
<th></th>
<th>BN.2A MARK III-1 (Interim) note a</th>
<th>BN.2A MARK III-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
<td>9825 lb (4457 kg)</td>
<td>10000 lb (4536 kg)</td>
</tr>
<tr>
<td>Landing</td>
<td>9350 lb (4241 kg)</td>
<td>10000 lb (4536 kg)</td>
</tr>
<tr>
<td>Wing Zero Fuel</td>
<td>9350 lb (4241 kg)</td>
<td>9700 lb (4400 kg)</td>
</tr>
</tbody>
</table>

14. Centre of Gravity Range  

<table>
<thead>
<tr>
<th></th>
<th>Forward Limit</th>
<th>Aft Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BN.2A MARK III-1 (Interim) note a</td>
<td>+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</td>
<td>+25.6 in at all weights</td>
</tr>
<tr>
<td>BN.2A MARK III-1</td>
<td>+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</td>
<td>+25.6 in at all weights</td>
</tr>
</tbody>
</table>

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

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.

   Document No. MM/2

3. Maintenance Schedule
   Document No. MS/2

   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 Blue Papers:
       - 377, 18 September 1969: Sub-section K7 – Operating Limitations and Information
       - 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 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 (15.01 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 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

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Symbol</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Exceed Speed, $V_{NE}$</td>
<td></td>
<td>182 KIAS (182 KEAS)</td>
</tr>
<tr>
<td>Normal Operating Limit Speed, $V_{NO}$</td>
<td></td>
<td>142 KIAS (140 KEAS)</td>
</tr>
<tr>
<td>Manoeuvring Speed, $V_{A}$</td>
<td></td>
<td>133 KIAS (132 KEAS)</td>
</tr>
<tr>
<td>Flaps, Take-off, $V_{F}$</td>
<td></td>
<td>133 KIAS (130 KEAS)</td>
</tr>
<tr>
<td>Flaps, Landing, $V_{L}$</td>
<td></td>
<td>110 KIAS (112 KEAS)</td>
</tr>
<tr>
<td>Minimum Control Speed, $V_{MC}$</td>
<td></td>
<td>50 KIAS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mass Type</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
<td>10000 lb (4536 kg)</td>
</tr>
<tr>
<td>Landing</td>
<td>10000 lb (4536 kg)</td>
</tr>
<tr>
<td>Wing Zero Fuel</td>
<td>9700 lb (4400 kg)</td>
</tr>
</tbody>
</table>

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)

   Document No. MM/2

3. Maintenance Schedule
   Document No. MS/2

   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 SPR 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
       - 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 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  (15.01 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 operations 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, $V_L$: 110 KIAS (112 KEAS)
- Minimum Control Speed, $V_{MC}$: 50 KIAS

11. Flight Envelope

- Maximum operating altitude 10000ft

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 130 lb. 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.
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22. (Reserved) 

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   Approved by ARB on 6th May 1971. 
   (R1, D4, D5, D7, D8, D10, D12, D14, R2, D18, R3, D22) 

   Document No. MM/2 

3. Maintenance Schedule  
   Document No. MS/2 

   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.


4. FAR 135 Appendix A effective 19th July 1970.

   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

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<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
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<td>01</td>
<td>23 Nov. 2020</td>
<td>Initial Issue of the EASA TCDS derived from the UK TCDS no. BA6</td>
<td>23 Nov. 2020</td>
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