

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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SECTIONA: 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



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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



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A.III. <u>Technical Characteristics and Operational Limitations</u>

1.		esign Definition	NB-M-457				
2.	Descrip	tion	landing gea	Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).			
3.	Equipmo	ent	Refer to Flig	ht Manual (s	ee section A.IV.)		
4.	Dimens	ions	Span	53 ft 0 i	n (16.15 m)		
			Length Height Wing Area	14 ft 2 i	· · · ·		
5.	Engine						
	5.1.	Model	3 Avco Lyco	ming O-540-I	E4C5		
	5.2.	Type Certificate	FAA E-295				
	5.3.	Limitations	For all opera	ation 2700 RI	PM (260hp)		
6.	Load fac	ctors		Flap UP	Flap DOWN		
			Positive	+3.34g	+2.0g		
			Negative	-1.34g	-0g		
7.	Propelle	r	One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix6) suffix4 or 78 inch diameter as indicated by suffix6) types fitted to each engine:			indicated by	
	7.1.	Model	HC-C2YK-2E HC-C2YK-2E HC-C2YK-2C HC-C2YK-2C	3/C8477-4 3/C8477A-4 C/C8477-4	or6 or6 or6 or6		
			HC-C2YK-20	CUF/FC8477A	-4 or6		
	7.2.	Type Certificate	EASA.IM.P.	130			
	7.3.	Number of blades	2				
	7.4.	Diameter			cated by suffix4 or cated by suffix6		
	7.5.	Sense of Rotation	Clockwise (p	oilot's view)			
8.	Fluids						
	8.1.	Fuel	-	• •) Avgas 100L or 100LL ual (see section A.IV.)		
	8.2.	Oil	Refer to Flig	ht Manual (s	ee section A.IV.)		
9.	Fluid ca	pacities					
		Fuel	Main Tanks Total: Usable: Tip Tanks (T Total: Usable:		136.8 US Gallons 129.8 US Gallons 59.2 US Gallons 55.2 US Gallons	(518 litres) (491 litres) (224 litres) (209 litres)	
	9.2.	Oil (per engine)		Dil Capacity: afe Oil Level:	12 US quarts 2.75 US quarts	(11.3 litres) (2.6 litres)	



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10.	Air Speeds	Normal Operating Limit Speed, V_{NO} : Manoeuvring Speed, V_A : Flaps, Take-off, V_F :		195 KIAS 152 KIAS 130 KIAS 113 KIAS 106 KIAS 50 KIAS	(188 KEAS) (149 KEAS) (128 KEAS) (113 KEAS) (108 KEAS)
11.	Flight Envelope	Maximum operating altit Refer to Flight Manual (se			
12.	Approved Operations Capability	Refer to applicable Flight section A.IV.)	Manual an	d supplemer	nts (see
13.	Maximum Masses	Landing:	9350 lb	(4241 kg) (4241 kg) (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.			linearly to
15.	Datum	Coincident with wing lead	ding edge (S	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 v located on the left side of			aced are
	17.2. Lateral:	By lateral levelling marks on the main spar.	located on	the upper w	ving surface
18.	Minimum Flight Crew	1 (Pilot)			
19.	Maximum Passenger Seating Capacity	17			
20.	Baggage/CargoCompartments 20.1. MainCompartment	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 not exceed 400 lb.	0 lb/sq.ft. <i>,</i> b	out the total	load shall
21.	Wheels and Tyres	Nose Wheel Tyre Size: Main Wheel Tyre Size:	One: 6 Four: 7		
22.	(Reserved)				



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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.



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SECTION B: BN.2A MARK III-1

B.I. <u>General</u>

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



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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



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B.III. <u>Technical Characteristics and Operational Limitations</u>

1.		sign Definition	BN.2A MAF	RKIII-1 (Interim)		
2.	Descript	ion	Three-engination International Three-engination International Internationa International International Internation	BN.2A MARK III-1 NB-M-602 Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).		
3.	Equipme	ent	Refer to Flig	ght Manual (see	esection B.IV.)	
4.	Dimensi	ons	-	Span53 ft0 in(16.15 m)Length45 ft8.5 in(13.93 m)		
5.	Engine	Madal			<u>сг</u>	
	5.1.	Model		oming O-540-E4	65	
	5.2.	Type Certificate	FAA E-295			
	5.3.	Limitations	For all oper	ation 2700 RPN	,	
6.	Load fac	tors	Positive Negative	Flap UP / TO +3.30g -1.32g	Flap DOWN +2.0g -0g	
7.	Propelle	r	One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix4 or 78 inch diameter as indicated by suffix6) types fitted to each engine:			
	7.1.	Model	HC-C2YK-2 HC-C2YK-2 HC-C2YK-2	B/C8477-4 B/C8477A-4 C/C8477-4 C/C8477A-4 CF/FC8477A-4 CUF/FC8477A-4		
	7.2.	Type Certificate	EASA.IM.P.	130		
	7.3.	Number of blades	2			
	7.4.	Diameter			ted by suffix4 o ted by suffix6	r
	7.5.	Sense of Rotation	Clockwise (pilot's view)		
8.	Fluids					
	8.1.	Fuel			Avgas 100L or 100L al (see section B.IV	
	8.2.	Oil	Refer to Flig	ght Manual (see	esection B.IV.)	
9.	Fluid cap	pacities				
	9.1.	Fuel	Main Tanks Total: Usable:		136.8 US Gallons 129.8 US Gallons	(518 litres) (491 litres)
			Tip Tanks (1		-	
			Total: Usable:		59.2 US Gallons 55.2 US Gallons	(224 litres) (209 litres)



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	9.2. Oil (per engine)	Maximum Oil Capacity: 1 Minimum Safe Oil Level:	12 US quarts 2.75 US quarts	(11.3 litres) (2.6 litres)
10.	Air Speeds	Never Exceed Speed, V _{NE} : Normal Operating Limit Spee Manoeuvring Speed, V _A : Flaps, Take-off, V _F : Flaps, Landing, V _F : Minimum Control Speed, V _M	133 KIAS 133 KIAS 110 KIAS	(176 KEAS) (140 KEAS) (132 KEAS) (130 KEAS) (112 KEAS)
11.	Flight Envelope	Maximum operating altitude Refer to Flight Manual (see s		
12.	Approved Operations Capability	Refer to applicable Flight Ma section B.IV.)	anual and suppleme	ents (see

13. Maximum Masses

	BN.2A MARKI	II-1 (Interim) ^{note a}	BN.2A MARKI	11-1
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

BN.2A MARK III-1 +20.0 in at weights (Interim) ^{note a} linearly to +21.0 in linear variation from		+20.0 in at weigh linearly to +21.0	orward Limit ts up to 8750 lb, then varying in at 9350 lb, with a further om this position to +22.5 in at	Aft Limit +25.6 in at all weights
BN.2A MARK III-1 +20.0 in at weight linearly to +21.0 i		+20.0 in at weight linearly to +21.0 linear variation fro	ts up to 8750 lb, then varying in at 9350 lb, with a further om this position to +23.0 in at	+25.6 in at all weights
15.	Datum		Coincident with wing leading edge	e (STN 234.5)
16.	Control Surface	Deflections	Aircraft rigged in accordance with Manual MM/2	Trislander Maintenance
17.	Levelling Means	5		
	17.1. Fore a	nd Aft:	Holes for datum pins on which stra located on the left side of the cent	
17.2. Lateral:		ıl:	By lateral levelling marks located on the upper wing surface on the main spar.	
18.	Minimum Flight	Crew	1 (Pilot)	
19.	Maximum Pass	enger Seating		
	Capacity		17	



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20.	Baggage/CargoCompartments	
	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.
~ 4		

21. Wheels and Tyres

	BN.2A	MARKIII-1 (Interim) ^{note a}	BN.2A	MARKIII-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. <u>Notes</u>

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.



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SECTION C: BN.2A MARK III-2

C.I. <u>General</u>

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. 8.	EASA Type Certification Date UK C.A.A. T.C.D.S. Number	See section E.I. Note 2 BA6



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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	



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C.III. <u>Technical Characteristics and Operational Limitations</u>

1.		esign Definition	NB-M-610			
2.	. Description		landing gea	Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).		
3.	Equipmo	ent	Refer to Flig	ght Manual (s	ee section C.IV.)	
4.	Dimens	ions	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	-	ming O-540-E	4C5	
	5.2.	Type Certificate	FAA E-295			
	5.3.	Limitations	For all operation	ation 2700 RF		
6.	Load fac	ctors	D	Flap UP / TC	•	
			Positive Negative	+3.30g -1.32g	+2.0g	
7.	Propelle	r	Negative -1.32g -0g One of the following Hartzell approved propellers of the same diameter grouping (80 inch diameter as indicated by suffix4 or 78 inch diameter as indicated by suffix6) types fitted to each engine:		indicated by	
	7.1.	Model	HC-C2YK-2E HC-C2YK-2E HC-C2YK-20 HC-C2YK-20 HC-C2YK-20	3/C8477-4 3/C8477A-4	or6 or6 or6 or6 4 or6	
	7.2.	Type Certificate	EASA.IM.P.	130		
	7.3.	Number of blades	2			
	7.4.	Diameter			ated by suffix4 or ated by suffix6	
	7.5.	Sense of Rotation	Clockwise (j	pilot's view)		
8.	Fluids					
	8.1.	Fuel		• •	Avgas 100L or 100LL ual (see section C.IV.	
	8.2.	Oil	Refer to Flig	ght Manual (s	ee section C.IV.)	
9.	Fluid ca	-				
	9.1.	Fuel	Main Tanks Total: Usable: Tip Tanks (T Total: Usable:		136.8 US Gallons 129.8 US Gallons 59.2 US Gallons 55.2 US Gallons	(518 litres) (491 litres) (224 litres) (209 litres)
	9.2.	Oil (per engine)		Dil Capacity: afe Oil Level:	12 US quarts 2.75 US quarts	(11.3 litres) (2.6 litres)



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10.	Air Speeds	Never Exceed Speed, V_{NE} : Normal Operating Limit Speed, V_{NO} : Manoeuvring Speed, V_A : Flaps, Take-off, V_F : Flaps, Landing, V_F : Minimum Control Speed, V_{MC} :	182 KIAS(182 KEAS)142 KIAS(140 KEAS)133 KIAS(132 KEAS)133 KIAS(130 KEAS)110 KIAS(112 KEAS)50 KIAS50 KIAS
11.	Flight Envelope	Maximum operating altitude 10000 Refer to Flight Manual (see section (
12.	Approved Operations Capability	Refer to applicable Flight Manual an section C.IV.)	d supplements (see.
13.	Maximum Masses	Take-off: 10000 lb Landing: 10000 lb Wing Zero Fuel: 9700 lb	(4536 kg) (4536 kg) (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/CargoCompartments 20.1. MainCompartment	Maximum intensity is 120 lb/sq.ft., b forward of the front spar frame shal and the total load aft of the rear spa exceed 1000 lb. Between spar frame shall not exceed 820 lb.	ll not exceed 1500 lb, ar frame shall not
		Between the rear of the pilot's seat a the load per foot run shall not excee Between the rear spar frame and the	ed 130lb. per foot run.
	20.2. Rear Baggage Platform:	the load per foot run shall not exceed 150 lb. per foot run. Maximum intensity is 120 lb/sq.ft., but the total load shall	
	20.3. Forward Baggage Bay:	not exceed 400 lb. Maximum intensity is 120 lb/sq.ft., b not exceed 300 lb.	out the total load shall



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21. Wheels and Tyres	Nose Wheel Tyre Size:	One: 6.00 x 6
	Main Wheel Tyre Size:	Four: 6.50 x 8

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.



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SECTION D: BN.2A MARK III-3

D.I. <u>General</u>

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. 8.	EASA Type Certification Date UK C.A.A. T.C.D.S. Number	See section E.I. Note 2 BA6



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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



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D.III. Technical Characteristics and Operational Limitations

1.		esign Definition	NB-M-881			
2.	Descrip	Three-engine, high wing aircraft, metallic construction, fixed landing gear, number of persons including crew not to exceed eighteen (18).				
3.	Equipme	ent	Refer to Flig	ht Manual (s	ee section D.IV.)	
4.	Dimens	ions	Span Length Height Wing Area	14 ft 2 i	53 in (15.01m) n (4.32 m)	
5.	Engine					
	5.1.	Model	-	ming O-540-E	E4C5	
	5.2.	Type Certificate	FAA E-295			
	5.3.	Limitations	For all opera	ation 2700 RI	PM (260hp)	
6.	Load fac	ctors		Flap UP / TC	•	
			Positive Nogativo	+3.30g -1.32g	+2.0g	
7.	Propelle	r	same diame suffix4 oi	following Har eter grouping	-Og tzell approved propell (80 inch diameter as neter as indicated by s	indicated by
	7.1.	Model	HC-C2YK-2E HC-C2YK-2E HC-C2YK-2C HC-C2YK-2C HC-C2YK-2C	8/C8477-4 8/C8477A-4 C/C8477-4	or6 or6 or6 or6 4 or6	
	7.2.	Type Certificate	EASA.IM.P.:	130		
	7.3.	Number of blades	2			
	7.4.	Diameter			ated by suffix4 or ated by suffix6	
	7.5.	Sense of Rotation	Clockwise (p	oilot's view)		
8.	Fluids					
	8.1.	Fuel			Avgas 100L or 100LL ual (see section D.IV.	
	8.2.	Oil	Refer to Flig	ht Manual (s	ee section D.IV.)	
9.	Fluid ca					
	9.1.	Fuel	Main Tanks Total: Usable: Tip Tanks (T Total: Usable:		136.8 US Gallons 129.8 US Gallons 59.2 US Gallons 55.2 US Gallons	(518 litres) (491 litres) (224 litres) (209 litres)
	9.2.	Oil (per engine)	Maximum C)il Capacity: afe Oil Level:	12 US quarts 2.75 US quarts	(11.3 litres) (2.6 litres)



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10.	Air Speeds	Never Exceed Speed, V_{NE} : Normal Operating Limit Speed, V_{NO} : Manoeuvring Speed, V_A : Flaps, Take-off, V_F : Flaps, Landing, V_F : Minimum Control Speed, V_{MC} :	182 KIAS(182 KEAS)142 KIAS(140 KEAS)133 KIAS(132 KEAS)133 KIAS(130 KEAS)110 KIAS(112 KEAS)50 KIAS50 KIAS
11.	Flight Envelope	Maximum operating altitude 10000 [.] Refer to Flight Manual (see section I	
12.	Approved Operations Capability	Refer to applicable Flight Manual an section D.IV.)	id supplements (see
13.	Maximum Masses	Take-off: 10000 lb Landing: 10000 lb Wing Zero Fuel: 9700 lb	(4536 kg) (4536 kg) (4400 kg)
14.	Centre of Gravity Range	Forward limit: +19.0 in at weights up to 8750 lb, t +20.0 in at 10000 lb. Aft limit: +25.6 in at weights up to 8750 lb, t +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 T Manual MM/2	rislander Maintenance
17.	Levelling Means		
	17.1. Fore and Aft:	Holes for datum pins on which straig located on the left side of the centre	
	17.2. Lateral:	By lateral levelling marks located on on the main spar.	the upper wing surface
18.	Minimum Flight Crew	1 (Pilot)	
19.	Maximum Passenger Seating Capacity	17	
20.	Baggage/CargoCompartments 20.1. MainCompartment	Maximum intensity is 120 lb/sq.ft., I forward of the front spar frame sha and the total load aft of the rear spa exceed 1000 lb. Between spar frame shall not exceed 820 lb.	ll not exceed 1500 lb, ar frame shall not
		Between the rear of the pilot's seat a the load per foot run shall not excee Between the rear spar frame and the the load per foot run shall not excee	ed 130lb. per foot run. e baggage compartment,
	20.2. Rear Baggage Platform:	Maximum intensity is 120 lb/sq.ft., I not exceed 400 lb.	but the total load shall
	20.3. Forward Baggage Bay:	Maximum intensity is 120 lb/sq.ft., I not exceed 300 lb.	but the total load shall



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21. Wheels and Tyres	Nose Wheel Tyre Size:	One: 6.00 x 6
	Main Wheel Tyre Size:	Four: 6.50 x 8

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.



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SECTION E: DATA PERTINENT TO ALL MODELS

E.I. <u>Notes</u>

- 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.MarkIII basic design plus modification NB-M-510 only (NB-M-501, NB-M-502 and NB-M-508 are not included).



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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

lssue	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-



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