

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A11EU
Revision 5
British Aerospace
Aircraft Group
Scottish Division
Beagle B.206
Series 1 & 2

June 19, 1979

TYPE CERTIFICATE DATA SHEET NO. A11EU

This data sheet which is part of Type Certificate No. A11EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder British Aerospace, Aircraft Group,
Scottish Division
Prestwick Airport Ayrshire
Scotland KA9 2RW

I - Model B.206 Series 1, 7PCLM (Normal Category), Approved November 7, 1966.

Engines	2 Continental GIO-470-A		
Fuel	100/130 minimum grade aviation gasoline		
Engine limits	For all operations, 3,200 r.p.m. (310 H.P.)		
Propeller and propeller limits	McCaughey 2AF36C68/100 RFM-10 2 bladed metal. Diameter range 90" maximum - 88" minimum (No further reduction permitted). Pitch setting at 36 in. station: Low 12° High 81.6°		
Airspeed limits (I.A.S.)		<u>Knots</u>	<u>M.P.H.</u>
	Vne (never exceed)	235	270
	Vno (Max. structural cruising)	210	242
	Vp (Manoeuvring)	155	178
	Vfe (Flaps down 20°)	135	155
	Vfe (Flaps down 40°)	125	144
	Vlo (Landing gear operation)	125	144
	Vmc (Minimum control)	66	76
	Maximum speed for cooling flaps operation and open.	210	242
C.G. range (Landing gear extended)	(+126.9 in.) to (+134.2 in.) with 6,000 lbs. (+128.1 in.) to (+134.2 in.) with 6,400 lbs. Straight line variation between points. Moment due to retracting landing gear - 1,900 in.lb.		
Empty weight C.G. range	None		
Datum	Fuselage station zero which is situated 132.5 inches forward of the weighing reference station which is marked on a plate on the fuselage.		
Leveling means	Holes for datum pins on which straight edge is placed, are located on the left side of the fuselage.		
Maximum weight	6,400 lbs.		
Number of seats	7 (2 at (+108)), (2 at (+141)), (3 at (+174))		
Maximum baggage	210 lbs. (+205)		

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Fuel capacity	228 U.S. galls. usable (+145) (See Note 1 for data on unusable fuel)		
Oil capacity	7.0 U.S. galls. usable (+75). (See Note 1 for data on system oil)		
Control surface movements	Wing flaps		Down $39^\circ \pm 1^\circ$
	Aileron	Up $23^\circ \pm 0.25^\circ$	Down $17^\circ \pm 0.25^\circ$
	Aileron tab	Up $16^\circ \pm 0.25^\circ$	Down $16^\circ \pm 0.25^\circ$
	Elevator	Up $25^\circ \pm 0.25^\circ$	Down $15^\circ \pm 0.25^\circ$
	Elevator trim tab	Up $15^\circ + 1^\circ, -0.5^\circ$	Down $25^\circ + 1^\circ, -0.5^\circ$
	Elevator anti-balance tab	Up $20^\circ \pm 1^\circ$	Down $13^\circ \pm 1^\circ$
	Rudder	Right $25^\circ \pm 0.5^\circ$	Left $25^\circ \pm 0.5^\circ$
	Rudder tab	Right $20.5^\circ \pm 0.5^\circ$	Left $20.5^\circ \pm 0.5^\circ$
Certification basis	FAR 21.29		
	CAR 3, May 15, 1956, including amendments 3-1 through 3-8.		
	Type Certificate No. A11EU issued November 7, 1966.		
	Date of application for Type Certificate January 22, 1965.		
Equipment	Equipment is as listed in Equipment List B2/B206/1. Approved alternate equipment is as listed in CAA letter 9/30/ABA/08 dated August 18, 1976.		
	Basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) is marked with a star in the Equipment List and must be installed in the aircraft for certification. In addition, the Flight Manual for the aircraft is the A.R.B. approved Airplane Flight Manual DOC. No. BS.1-5 dated October 20, 1966.		

II - Model B.206 Series 2, 7PCLM (Normal Category), Approved April 18, 1967.

Engines	2 Continental GTSIO-520-C		
Fuel	100/130 minimum grade aviation gasoline		
Engine limits	For all operations, 3,200 r.p.m. (340 H.P.) (SEE NOTE 4).		
Propeller and propeller limits	McCaughey 3F34C86/90LF 3 bladed metal.		
	Diameter range 90" maximum - 88" minimum (No further reduction permitted).		
	Pitch setting at 30 in. station:		
	Low 13° High 85°		
	Hartzell HC-A3VF-2D/V8833B		
	Diameter range 88-3/8" maximum - 86-3/8" minimum. (No further reduction permitted)		
Airspeed limits (I.A.S.)	Pitch setting at 30 in. station:		
	Low 15° High 85°		
		<u>Knots</u>	<u>M.P.H.</u>
	Vne (never exceed)	235	270
	Vno (Max. structural cruising)	210	242
	Vp (Maneuvering)	155	178
	Vfe (Flaps down 20°)	140	161
	Vfe (Flaps down 40°)	125	144
	Vle (Landing gear extended)	140	161
	Vlo (Landing gear operation)	125	144
	Vmc (Minimum control)	66	76
Maximum speed for cooling flaps operation and open.	210	242	

C.G. range (Landing gear extended)	(+123.4 in.) to (+133.5 in.) with 5,750 lbs. (+128.0 in.) to (+133.5 in.) with 7,500 lbs. Straight line variation between points. Moment due to retracting landing gear 1,890 in.lb.		
Maximum weight	7,500 lbs. Maximum zero fuel weight 7,050 lb.		
Number of seats	8 (2 at (+108)), (2 at (+141)), (2 at (+170)), (2 at (+199)).		
Maximum baggage	180 lbs. (+232)		
Fuel capacity	228 U.S. gal. usable (+145) (See NOTE 1 for data on unusable fuel)		
Oil capacity	6.5 U.S. gal. usable (+70). (See NOTE 1 for data on system oil)		
Control surface movements	Wing flaps		Down $39^{\circ} \pm 1^{\circ}$
	Aileron	Up $23^{\circ} \pm 0.25^{\circ}$	Down $17^{\circ} \pm 0.25^{\circ}$
	Aileron tab	Up $16^{\circ} \pm 0.25^{\circ}$	Down $16^{\circ} \pm 0.25^{\circ}$
	Elevator	Up $25^{\circ} \pm 0.25^{\circ}$	Down $15^{\circ} \pm 0.25^{\circ}$
	Elevator trim tab	Up $19^{\circ} \pm 0.5^{\circ}$	Down $29.5^{\circ} \pm 0.5^{\circ}$
	Elevator anti-balance tab (Flaps up)	Up $19^{\circ} \pm 1^{\circ}$	Down $15^{\circ} \pm 1^{\circ}$
	Rudder	Right $25^{\circ} \pm 0.5^{\circ}$	Left $25^{\circ} \pm 0.5^{\circ}$
	Rudder tab	Right $20.5^{\circ} \pm 0.5^{\circ}$	Left $20.5^{\circ} \pm 0.5^{\circ}$
Certification basis	<p>FAR 21.29 CAR 3, May 15, 1956, including amendments 3-1 through 3-8, FAR 23.205 as amended by amendment 23-3, and FAR 23.1325 as amended by amendment 23-1. Type Certificate No. A11EU amended April 18, 1967.</p> <p>Date of application for Type Certificate: January 22, 1965.</p> <p>Compliance has been established with the following optional requirements: Ice Protection Provisions FAR 25.1419 when Beagle Modifications 424 and 443, Goodrich deicing boots on the leading edges of wing, stabilizer and fin have been installed.</p>		
Equipment	<p>Equipment is as listed in Equipment List B2/B206/2. Basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) is marked with a star in the Equipment List and must be installed in the aircraft for certification. In addition, the Flight Manual for the aircraft is the A.R.B. Approved Airplane Flight Manual DOC. No. BS 1/6 dated February 15, 1967.</p>		

SPECIFICATIONS PERTINENT TO ALL MODELS

Datum	Fuselage station zero which is situated 132.5 inches forward of the weighing reference station which is marked on a plate on the fuselage.
Leveling means	Holes for datum pins on which straight edge is placed, are located on the left side of the fuselage.
Serial Nos. eligible	The United Kingdom Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made.

Import requirements

A United States Airworthiness Certificate may be issued on the basis of a U.K. Certificate of Airworthiness for Export signed by a representative of the Board of Trade containing the following statement:

"The aircraft covered by this Certificate has been examined and found to comply with CAR 3 effective May 15, 1956 including amendments 3-1 through 3-8 and conforms to Type Certificate A11EU."

NOTE 1: Current weight and balance report including list of equipment in certificated empty weight and loading instructions, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 36 lbs. (146.9) and system oil of 9 lbs. (75.0 Series 1) (70.0 Series 2).

NOTE 2: The following placard must be displayed on the instrument panel in fuel view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS MARKINGS AND MANUALS, NO ACROBATIC MANOEUVRES INCLUDING SPINS ARE APPROVED."

FOOTNOTE:

All placards required in the Approved Airplane Flight Manual must be installed in the appropriate locations.

NOTE 3: Each individual airplane will be supplied with a placard that specifies the kind of operation such as V.F.R. , I.F.R., day or night to which the operation of the airplane is limited by the equipment installed.

NOTE 4: Avoid continuous operation between 2800 and 3135 rpm.

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