

Type Certificate

Number: VA516

Issue: 4

Type Certificate Holder: Boomerang Owners Group Pty Ltd

61 Gregory Street, Acacia Ridge,

QLD 4110

This certificate issued to Boomerang Owners Group Pty Ltd, certifies that, pursuant to regulation 21.013A of the Civil Aviation Safety Regulations 1998 approval is hereby granted for the following aircraft.

> DW200 **DW200A**

This certificate is valid until it is suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as described in type certificate data sheet number VA516.

Date of application: 13 May 2003

Date of reissue:

05 October 2017

Date of issue:

18 December 2007 Date of reissue:

24 April 2020

Richard Stocker

Delegate of the Authority

No: VA516 Revision: 5

Aircraft: Boomerang Owners Group

Pty Ltd DW200, DW200A

Date 24 April 2020

TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of Type Certificate No. VA516, lists the conditions and operational limitations under which the subject aircraft meets the airworthiness requirements of the Civil Aviation Safety Authority.

Certificate Holder

Boomerang Owners Group Pty Ltd

61 Gregory Street, Acacia Ridge,

QLD 4110 Australia

Previous Certificate Holder

Dean-Wilson Aviation Limited

ACN 103 360 274

PO Box 452,

Kingaroy, QLD 4610

Australia

I Model DW200 (Normal Category) Approved 18 December 2007

Engine

Textron Lycoming O-235-N2C

Fuel

100/130 aviation gasoline (Green)

100LL aviation gasoline (Blue)

Engine Limits

116 BHP at 2800 RPM

Propeller

McCauley 1A135/JCM7147 2 blade metal, fixed pitch

Diameter

Not over

1803 mm

Not under

1767 mm

DELEGATE SETTINE ATTACKTY

Airspeed Limits Never exceed V_{ne} 152 KIAS

Max structural cruise V_{no} 112 KIAS Manoeuvring V_a 112 KIAS

Max flaps extended V_{fe} 81 KIAS

Centre of Gravity Range Forward Limit 280 mm 20.0% MAC
Aft Limit 364 mm 26.0% MAC

Mean Aerodynamic Chord 1400 mm

Datum Wing Leading Edge – Inboard

(Fuselage Station 624.4mm, Fuselage Station 0 is the centreline

of the fuselage tubes just aft of the firewall)

Levelling Means Longitudinal By spirit level on the lower door sill

Lateral By spirit level across left and right door sills

Maximum Weights Maximum Taxi, Take-off and Landing 825 kg

Flight Load Factor Limits

Flaps Up +4.4g, -2.2g Flaps Down +2.0g, 0.0g

Minimum Crew One (permitted from either seat)

Number of Seats Two (+380 mm)

Maximum Baggage 20 Kg

Fuel Capacity

Total Fuel Capacity

150.6 litres (39.8 US gallons)

Total Fuel Each Tank 75.3 litres (19.9 US gallons)

Total Useable Fuel 138.6 litres (36.6 US gallons)
Total Unusable Fuel 12 litres (3.2 US gallons)

(6 litres per Tank)

Oil Capacity Total 5.7 litres

Minimum Safe Quantity 3.8 litres

Crosswind Component Maximum for take-off and landing 12 knots

Maximum Operation Altitude 10,000 ft AMSL

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Control Surface	Elevator	Up	$30.0^{\circ} \pm 1.0^{\circ}$	Down	$25.0^{\circ} \pm 1.0^{\circ}$
Movements	Aileron	Up	$21.0^{\circ} \pm 1.0^{\circ}$	Down	$16.0^{\circ} \pm 1.0^{\circ}$
	Rudder	Left	$25.0^{\circ} \pm 1.0^{\circ}$	Right	$25.0^{\circ} \pm 1.0^{\circ}$

Flap Movement Take Off Flap Clean Landing Flap $30.0^{\circ} \pm 1.0^{\circ}$

Manufacturer's B002 and Subsequent (refer Note 4 & 5). Serial numbers

Certification Basis Federal Aviation Regulations (FAR) Part 23 Amendment 55

Production Basis

Production under Type Certificate only. Prior to the issue of the original Certificate of Airworthiness for each aircraft, CASA must be satisfied with the workmanship, materials, conformity with the approved technical data and flight characteristics.

Operations Permitted Day and Night VFR

Equipment 1. The CASA approved Aircraft Flight Manual details required equipment for kinds of operations.

2. Other equipment may be required, to meet applicable operational regulations.

Type Design Data

1. Master Drawing List DW200-MDL-02 dated 10 August 2009 including later approved changes.

2. Aircraft Flight Manual, Document FM-1 "Whitney Boomerang DW200" Pilot Operating Handbook and Approved Flight Manual.

II Model DW200A (Normal Category) Approved 04 September 2009

Engine Textron Lycoming O-235-N2C

Fuel 100/130 aviation gasoline (Green) 100LL aviation gasoline (Blue)

Engine Limits 116 BHP at 2800 RPM

Propeller McCauley 1A135/JCM7145 2 blade metal, fixed pitch

Diameter Not over 1803 mm
Not under 1767 mm

Static RPM 2440-2540 rpm

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Airspeed Limits	Never exceed V _{ne}	152 KIAS				
•	Max structural cruise V _{no}	112 KIAS				
	Manoeuvring V _a	106 KIAS				
	Max flaps extended V _{fe}	77 KIAS				
Centre of Gravity Range	Forward Limit 280 mm	20.0% MAC				
	Aft Limit 364 mm	26.0% MAC				
	Mean Aerodynamic Chord	1400 mm				
Datum	Wing Leading Edge – Inboard (Fuselage Station 624.4mm, Fuselage Station 0 is the centreline of the fuselage tubes just aft of the firewall)					
Levelling Means	Longitudinal By spirit level on the lower door sill Lateral By spirit level across left and right door sills					
Maximum Weights	Maximum Taxi & Take-off	850 kg 825 kg				
	Maximum Landing					
Flight Load Factor Limits						
	Flaps Up	+3.8g, -1.9g				
	Flaps Down	+2.0g, 0.0g				
Minimum Crew	One (permitted from either seat)					
Number of Seats	Two (+380 mm)					
Maximum Baggage	30 Kg					
Fuel Capacity						
-	Total Fuel Capacity	150.6 litres (39.8 US gallons)				
	Total Fuel Each Tank	75.3 litres (19.9 US gallons)				
	Total Useable Fuel	138.6 litres (36.6 US gallons) 12 litres (3.2 US gallons) (6 litres per Tank)				
	Total Unusable Fuel					
Oil Capacity	Total	5.7 litres				
	Minimum Safe Quantity	3.8 litres				
Crosswind Component	Maximum for take-off and landing 12 knots					

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10,000 ft AMSL

Maximum Operation Altitude

Control Surface	Elevator	Up	$30.0^{\circ} \pm 1.0^{\circ}$	Down	$25.0^{\circ}\pm1.0^{\circ}$
Movements	Aileron	Up	$21.0^{\circ} \pm 1.0^{\circ}$	Down	$16.0^{\circ} \pm 1.0^{\circ}$
	Rudder	Left	$25.0^{\circ} \pm 1.0^{\circ}$	Right	$25.0^{\circ} \pm 1.0^{\circ}$

Flap Movement

Take Off Flap Clean Landing Flap $30.0^{\circ} \pm 1.0^{\circ}$

Manufacturer's Serial numbers

A001 and Subsequent.

Certification Basis

Federal Aviation Regulations (FAR) Part 23 Amendment 55

Production Basis

Production under Type Certificate only. Prior to the issue of the original Certificate of Airworthiness for each aircraft, CASA must be satisfied with the workmanship, materials, conformity with the approved technical data and flight characteristics.

Operations Permitted

Day and Night VFR

Equipment

- 1. The CASA approved Aircraft Flight Manual details required equipment for kinds of operations.
- 2. Other equipment may be required, to meet applicable operational regulations.

Type Design Data

- 3. Master Drawing List DW200-MDL-02A dated 10 August 2009 including later approved changes.
- 4. Aircraft Flight Manual, Document FM-2 "Whitney Boomerang DW200A" Pilot Operating Handbook and Approved Flight Manual.

Notes

- 1. A current weight and balance report including a list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of issue of a Certificate of Airworthiness.
- 2. The placards required in the approved Aircraft Flight Manual must be installed in the appropriate location.
- 3. Service life limits for life limited parts are contained in the applicable manufacturer's Maintenance Manuals, Chapter 4, Airworthiness Limitations.

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- 4. The wing fitted to S/No. B002 has a unique configuration. Any repairs to this wing must be referred to Dean Wilson Aviation.
- 5. For DW200 aircraft with DWA Service Bulletin 0006 incorporated, Use flight manual and limitations as per Model DW200A.

Revision Status

- 1. Revision 1 adds a new serial number to the applicability; deletes reference to Additional Conditions on the original TCDS; and corrects the Up Aileron angle.
- 2. Revision 2 adds model DW200A to the TCDS; adds note 5 for DW200 aircraft operating at 850kg MTOW; Adds TCDS Revision Status.
- 3. Revision 3 clarifies that the total unusable fuel is 12 litres, 6 litres in each tank.
- 4. Revision 4 transfers the Type Certificate from Dean-Wilson Aviation Limited to Boomerang Owners Group Pty Ltd.
- 5. Revision 5 Changes the address of Boomerang Owners Group Pty Ltd, and clarifies the specification of approved fuels for the DW200 and DW200A models.

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