

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A00077CE
Revision 1
Boomerang Owners Group
DW200
July 1, 2021

TYPE CERTIFICATE DATA SHEET NO. A00077CE

This data sheet which is part of Type Certificate No. A00077CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Boomerang Owners Group Pty Ltd
61 Gregory Street, Acacia Ridge,
QLD 4110
Australia (NOTE 5)

I. DW200 (Normal Category) Approved June 26, 2020

Engine One Lycoming O-235-N2C
FAA Type Certificate: E-223

Fuel 100/130 aviation gasoline
100LL aviation gasoline.

Engine Limits 116 BHP at 2800 RPM

Oil As specified in the latest revision of Lycoming Spec. No. 301-F and
Service Instruction No.1014.

Propeller and One McCauley 1A135/JCM7147 two-blade aluminium, fixed pitch
Propeller Limits FAA Type Certificate: P-842
Diameter: Not over 70.98 in. (1803 mm).
 Not under 69.57 in. (1767 mm).
 No further reduction permitted
Static rpm at full throttle:
Maximum: 2550 rpm.
Minimum: 2450 rpm.

Airspeed Limits Never exceed (VNE) 152 KIAS
Maneuvering (V_A) 112 KIAS
Max structural cruise (V_{NO}) 112 KIAS
Max flaps extended (V_{FE}) 81 KIAS

Center of Gravity Forward: 11 in. (280 mm) aft of datum at all weights.
(C.G.) Range Aft: 14.3 in. (364 mm) aft of datum at all weights.

Empty Weight C.G. Range None.

| | | | | | | | | |
|----------|---|---|---|---|---|--|--|--|
| Page No. | 1 | 2 | 3 | 4 | 5 | | | |
| Rev. No. | 1 | 0 | 1 | 0 | 0 | | | |

| | | | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|
| <u>Datum</u> | Wing Leading Edge – Inboard (Fuselage Station 24.6 in. (624.4mm), Fuselage Station 0 is the centreline of the fuselage tubes just aft of the firewall) | | |
| <u>Leveling Means</u> | Longitudinal | By spirit level on the lower door sill | |
| | Lateral | By spirit level across left and right door sills | |
| <u>Maximum Weights</u> | Taxi | 1819 lbs. (825 kg) | |
| | Takeoff | 1819 lbs. (825 kg.) | |
| | Landing | 1819 lbs. (825 kg.) | |
| <u>Minimum Crew</u> | One pilot (permitted from either seat) | | |
| <u>Number of Seats</u> | Two. | | |
| | Pilot Seat Arms | seat forward 11.1 in. (284mm) aft of datum seat aft 18.5 in. (469mm) aft of datum | |
| | Passenger Seat Arms | seat forward 11.1 in. (284mm) aft of datum seat aft 18.5 in. (469mm) aft of datum | |
| <u>Maximum Baggage</u> | 44 lbs. (20 kg) at 44.09in. (1120mm) aft of datum. | | |
| <u>Fuel Capacity</u> | Total Fuel Capacity | 39.8 US gallons (150.6 litres) | |
| | Total Fuel Each Tank | 19.9 US gallons (75.3 litres) | |
| | Mid-Fuel Weight Arm is 11in (280mm). Fuel arm varies dependant on fuel load. | | |
| | Total Useable Fuel | 36.6 US gallons (138.6 litres) | |
| | Total Unusable Fuel | 3.2 US gallons (12 litres) | |
| | | (6 litres per Tank) | |
| | Refer to flight manual for fuel distribution weight and balance data. See Note 1. | | |
| <u>Oil Capacity</u> | Total Capacity | 6 US quarts (5.7 litres) (2 US quarts (1.9 litres) useable) | |
| | Oil arm | -45.6 in (-1159mm) aft of datum | |
| | See Note 1 for data on system oil. | | |
| <u>Maximum Operation Altitude</u> | 10,000 feet AMSL | | |
| <u>Control Surface Movements</u> | Elevator Up | 30.0° ± 1.0° | Down 25.0° ± 1.0° |
| | Aileron Up | 21.0° ± 1.0° | Down 16.0° ± 1.0° |
| | Rudder Left | 25.0° ± 1.0° | Right 25.0° ± 1.0° |
| | Flap Movement | Take Off Flap | Clean |
| | | Landing Flap | 30.0° ± 1.0° |
| <u>Manufacturer's Serial Numbers</u> | B002 to B005 (refer NOTE 6 & 7). B006 and subsequent. A CASA Certificate of Airworthiness for Export must be submitted for each individual airplane. See “Import Requirements.” | | |
| <u>Import Requirements</u> | A United States airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority containing the following statement: “The aircraft covered by this certificate has been examined, tested and found to comply with the Master Drawing List DW200-MDL-03 dated 06 Apr 2020 or later FAA approved revisions approved under US Type Certificate No. A00077CE and to be in a condition for safe operation” | | |

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

Per 21.50(b), Instructions for Continued Airworthiness (ICA) complying with FAR 23.1529, must be furnished before delivery of the first airplane or issuance of a US standard certificate of airworthiness, whichever occurs later. (NOTE 4)

Certification Basis

The regulations (unless otherwise stated) are Title 14 of the Code of Federal Regulations (14CFR):

- 1) FAR 21.29, 21.183(c) and FAR 23 dated February 1, 1965, as amended through Amendment 23-55 effective March 1, 2002.
- 2) 14 CFR Part 36, effective December 1969, including Amendments 36-1 through 36-31.
- 3) No Equivalent Level of Safety per 21.21(b)(1).
- 4) No Exemptions
- 5) No Special Conditions
- 6) Day and Night VFR operations only
- 7) The airplane is not approved for ditching
- 8) The airplane is not approved for flight into known or forecasted icing.
- 9) CASA issued CASA Type Certificate No. VA516 on December 18, 2007 for the DW200 model. (NOTE 7)

Date of application for original FAA type certificate: June 3, 2019

Type Certificate No. A00077CE, issued June 26, 2020.

Production Basis

No FAA production certification.

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

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition the approved (for FAA) Flight Manual, Boomerang Owners Group, Whitney Boomerang DW200 Document FM-1 Rev. 4 dated 26 February 2020 or later approved version, must be carried.

Service Information

Each of the documents listed below must state that it is approved by the Civil Aviation Safety Agency (CASA):

- Aircraft flight manuals, and
- Airworthiness Limitations Section of the Service Manual.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to CASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available documents for the DW200 model:

Aircraft Flight Manual:

- Boomerang Owners Group, Whitney Boomerang DW200 Document FM-1 Rev. 4 dated 26 February 2020 or later CASA approved revisions. (NOTE 2)

Instructions for Continued Airworthiness (ICA): (NOTE 4)

- Airplane Maintenance Manual (AMM) Document DW200-00-10 Issue 2 dated TBD, or later CASA approved revisions (Chapter 4 is FAA and CASA approved). (NOTE 3)
- Illustrated Parts Catalog (IPC) Document No. TBD dated TBD or later accepted revisions.

NOTES

- NOTE 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 original certification. The certificated empty weight and the corresponding center of gravity location must include full oil [11.3lbs (5.1kg) at -45.6in (-1159 mm)] and unusable fuel [19lbs (8.6kg) at 12.8in (326 mm)].
- NOTE 2 Airplane operation must be in accordance with the CASA-approved Aircraft Flight Manual listed above. All placards listed in Section 2 of the FAA approved AFM must be displayed in the appropriate locations. Revisions to this DW200 document may be approved by CASA on behalf of the FAA, unless they are changes to the limitation section. The limitation changes require direct FAA approval for the US version of the AFM.
- NOTE 3 Mandatory retirement lives, required inspections, and inspection intervals of components are contained in the Airworthiness Limitations Section (Chapter 4) of the Airplane Maintenance Manual DW200-00-10 Issue 1 dated March 12, 2020. The US versions of the DW200 limitations may not be changed without CASA and direct FAA approval.
- NOTE 4 As of June 23, 2020, the complete set of ICAs have not been FAA accepted, but there is an agreement that they will be accepted before the first airplane standard certificate of airworthiness will be issued per 21.50(b). The ALS section of the ICA, chapter 4 of Airplane Maintenance Manual DW200-00-10 Issue 1 dated March 12, 2020 was FAA approved before the TC was issued.
- NOTE 5 Previous Australian TC holder before FAA validation was Dean-Wilson Aviation Limited of Kingaroy, QLD 4610, Australia. The Australian TC was transferred to Boomerang Owners Group from Dean-Wilson Aviation Limited on 05 Oct 2017 per Revision 4 of the CASA TCDS No. VA516.

NOTE 6

Serial Numbers B002 to B005 are eligible for import into the US only after they have been be reverted back from DW200A to DW200 model by removing the changes done per Dean Wilson Aviation Ltd. Service Bulletin SB0006, Initial Issue approved on 10 Aug. 2009. This de-modification must be approved by CASA before export from Australia.

NOTE 7

As of June 23, 2020, the DW200A model shown on CASA TC VA516 was not validated by the FAA at the same time as the DW200 model due to DW200A did not pass the part 36 Noise requirements at the time of testing. Until the DW200A passes the FAA part 36 requirements, it is not eligible for FAA validation.

...END....