



TYPE-CERTIFICATE DATA SHEET

EASA.BA.523

for
CAMERON TGB SERIES
Manned Tethered Gas Balloons

Type Certificate Holder:
CAMERON BALLOONS Ltd

St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM

For Variants: TGB-1150

Issue 2, 21 July 2020

List of effective Pages:

Page	1	2	3	4
Issue	2	2	2	2



CONTENTS

SECTION 1: GENERAL	3
I. General	3
II. Certification Basis.....	3
III. Technical Characteristics and Operational Limitations	3
IV. Operation and Service Instructions	4
V. Notes	4



SECTION 1: GENERAL

I. General

1. Data Sheet No: EASA.BA.523 Issue Date: 01 July 2020
2. Type / Variant or Model
 - (a) Type: Cameron TGB Series
 - (b) Variant or Model: TGB-1150
 - (c) Serial: 12043 & 12142
3. Airworthiness Category: Normal
4. Type Certificate Holder: **CAMERON BALLOONS LTD.**
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM
5. Manufacturer: **CAMERON BALLOONS LTD.**
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM
6. EASA Certification date: 10 July 2019

II. Certification Basis

1. Reference date for determining the applicable requirements: 10 Jan 2019
2. Airworthiness Requirements: *EASA CS 31TGB Initial Issue*
3. Special Conditions: SC-CS-31GB.61 Electrostatic discharge
SC-ELA.2015-1 Lithium Batteries
4. Reversion and Exemptions: *None*
5. Equivalent Safety Findings: *None*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: CB1783 Issue C or subsequent approved issue.
2. Description: Manned tethered gas balloon for theatrical display and transport of passengers.

2.1 Envelope:

Spherical envelope of approximately 1204 m³ total volume, constructed from coated fabric with load transfer by net and lines. An air ballonet of 20% volume is installed in the lower part of the envelope. Pressure is controlled by automatic air fans and automatically and manually controlled over pressure valves.

2.2 Gondola:

The gondola is a conventional basket of woven construction with a plywood floor; size 107 x 107 cm



3. Equipment: Helium pressure gauge.
Helium temperature gauge
Air ballonnet pressure gauge
Anemometer with ambient air temperature reading.
Load cell (winch-mounted)
Auto/manual helium valve
Auto/manual Ballonet Air valve
4. Ground Facilities: Electrically driven cable winch and controls from Ritter Maschinen (Fabriknummer: 19.PZWE.605). The usable cable length is 50m.
Display of balloon control system parameters via telemetry.
Anemometer display.
3 positioning winches manually controlled.
5. Minimum Occupants: None (pilot is ground-based).
6. Maximum Occupants: Three
7. Maximum Mass: 944 kg. Minimum free lift is calculated in Flight Manual Section 5
8. Maximum Windspeed: 8.3 m/sec (16 knots, 30 km/h) for flight operations,
27.8 m/sec (54 knots, 100 km/h) for mooring,
3.0 m/sec (6 knots, 11 km/h) for inflation
9. Minimum Crew: See Flight Manual Section 2.6
10. Life Limited Parts: See Maintenance Manual.
11. Lifting Gas: Helium.
12. Operational Limitations: Serials listed under I. 2 (c) can only be operated by the Bregenz Festspiele at the Lage Stage in Bregenz, Austria (47°30'21.6"N 9°44'16.8"E) until 31. Oct 2021.

IV. Operation and Service Instructions

1. Cameron Balloons Tethered Gas Balloon Flight Manual and Supplements - Issue 1 Amendment 5 or later approved EASA revision.
2. Cameron Balloons Tethered Gas Balloon Maintenance Manual and Supplements - Issue 1 Amendment 3 or later approved EASA revision.

V. Notes

- Note 1 Repairs and replacement of the tether system require a re-evaluation of the compliance declaration in accordance with 31TGB.53

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