

The technical context of this document is approved
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8.28 NIGHT FLYING

8.28.1 GENERAL INFORMATION

This supplement shall be inserted in the Flight Manual, in Section 8: 'Supplements' with the revisions record sheet amended accordingly.

Information contained herein supplements, or in the case of conflict, supersedes that contained in the basic Flight Manual. For Limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Hot Air Balloon Flight Manual.

Throughout this supplement the term "Cameron" refers to envelopes, burners and cylinders manufactured by Cameron, Lindstrand Hot Air Balloons Limited, Sky and Thunder & Colt.

8.28.2 LIMITATIONS

8.28.2.3 Fuel

3. Sufficient fuel must be carried to allow for a landing to be made during the day.

8.28.2.6 Safety Equipment (Minimum Equipment)

8. Approved anti-collision lights must be fitted. Approved lights are listed in Section 8.28.9.
9. A compass and maps, or a GPS capable of showing drift direction.
10. A minimum of two independent lights, at least one of which must be non hand held (e.g. a head torch).
11. A knife

8.28.2.13 Landing

1. The balloon shall not land at night, except in emergency situations.

8.28.3 EMERGENCY PROCEDURES

8.28.3.12 Emergency Landing

Landing at night is dangerous and must not be attempted unless continued flight presents a serious threat to safety.

Minimise the amount of time the balloon is flown at low level and use the independent lights to ensure the flight path and landing area is clear of power lines and obstructions.

8.28.3.13 Anti-Collision light failure

Continue flight using frequent bursts of the whisper burner.

Investigate the failure of the anti-collision light and rectify if possible (See manufacturers instructions).

If the failure cannot be rectified and the balloon is in contact with an ATC unit they should be notified.

8.28.3.14 Entanglement of anti-collision light

If the anti-collision light becomes entangled in a tree or obstacle, heat the balloon to try to release the light. If the light does not immediately release then cut the suspension cord(s) with a knife.

8.28.4 NORMAL PROCEDURES

Flight planning, including timing and weather information, should be made carefully so that the balloon will be able to remain airborne until after sunrise, and that a suitable landing area is available. Adequate fuel reserves are essential. Fuel consumption will be higher at night than during the day due to the absence of solar heating.

Ensure that all lights are fully charged and have sufficient duration for the proposed night flight.

Use the independent lights to perform all pre-flight, and in-flight checks and procedures as required.

Flying at low level should be avoided at night as obstructions (e.g. powerlines) may not be seen.

8.28.4.2 Preparation and Rigging

8.28.4.2.5 Compact Anti-Collision Light Installation

Prior to installation, ensure the karabiner, suspension rope and light assembly is free of damage that could prevent its correct operation.

Check that the light turns on and flashes when pressing the power button.

Install the light to the basket by looping the rope around a burner pole and securing using the karabiner.

NOTE: If the light is dim and not flashing, check that the battery is fully charged.
If the light is dim despite being fully charged, ensure the ambient temperature is above the specified minimum operating temperature.

8.28.4.4 Take-off

8.28.4.4.5 Compact Anti-Collision Light Deployment

After take-off, turn on the light and gently lower it over the side of the basket once at least 10 meters clear of ground obstacle.

8.28.4.13 Compact Anti-Collision Light Battery and Charging

Before first use, fully charge the battery via the rear charging port. The red light on the charger indicates that charging is in progress; the green light indicates that charging is complete. Keep the rubber cap of the charging port securely closed when not charging. Recharge the light after each use.

The battery takes approximately 3 hours to fully charge from a fully discharged state. The charging temperature range is 0°C to 40°C. Charging input uses a DC5521 connector, with a DC 12.6 V/ 1 Amp, 2-pin power plug supplied with the light set.

8.28.4.6 Landing

8.28.4.6.1 Approach to Landing

8.28.4.6.1.2 Compact Anti-Collision Light Retrieval

The light shall be retrieved into the basket and safely secured before landing, prior to any risk of entanglement with ground obstacles.

8.28.5 WEIGHT CALCULATIONS

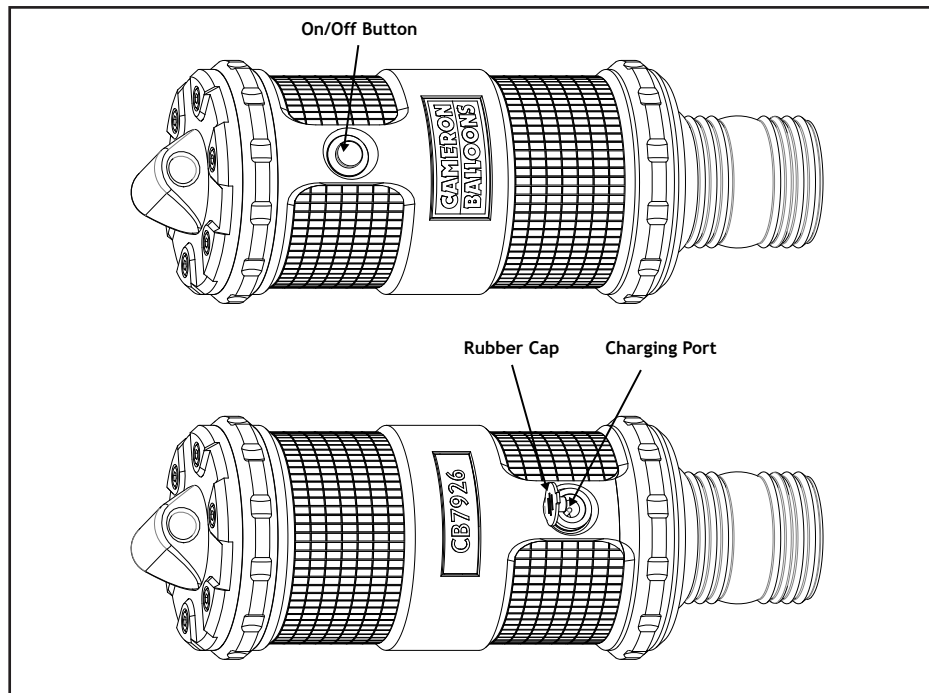
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8.28.6 BALLOON AND SYSTEMS DESCRIPTION

8.28.6.7 Compact Anti-Collision Light

The Compact Anti-Collision Light is a white flashing light operating at 100 CPM (Cycles per Minute) and has a demonstrated visibility of up to 3NM. It is designed to fulfil the requirement for anti-collision lighting for a balloon during night flying and reduce the risk of collision with other aircraft.

The light is powered by a 12 V Li-ion rechargeable battery with a minimum 3Ah capacity and is only operational at ambient temperatures between 0°C to 40°C. It is suspended from the basket from a suspension rope that is approximately 4.5m in length.



▲ Compact Anti-Collision Light

The light has a demonstrated operating time of 15 hours at ambient temperature from a full charge. It is splash proof and is not to be fully submerged in water.

CAUTION: The light is sealed and should not be opened other than by an approved CBL technician.

NOTE: Alternative specifications can be supplied to conform with the relevant aviation authority, including required operational temperature range and light colour. Please contact Cameron Balloons for further assistance.

8.28.7.5 Storage

8.28.7.5.1 Compact Anti-Collision Light

The anti-collision light, suspension rope and charger are stored in a hard-case box that is IP67 rated. The light is removed prior to use, with the suspension rope kept free from knots and entanglement and arranged for easy deployment.

To preserve battery lifespan during long-term storage, store the battery with a charge level between approximately 30-80% and at standard room temperature in a cool, dry environment. Avoid storing the battery when fully charged or fully discharged, and keep it away from excessive heat or extreme temperatures.

8.28.9 EQUIPMENT LIST

8.28.9.3.7 Compact Anti-Collision Light

<i>Part Number</i>	<i>Description</i>	<i>Weight [kg]</i>
CB7926	Anti Collision Light Assembly	0.75kg
CB7926-0609	Hard Case Box	1.75kg
CB7926-2001	2 Pin Charger	-

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