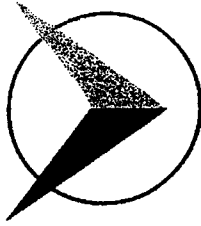


COMMONWEALTH OF AUSTRALIA



CIVIL AVIATION  
SAFETY AUTHORITY  
AUSTRALIA

**CERTIFICATE OF TYPE APPROVAL**

**Number: 223-1**

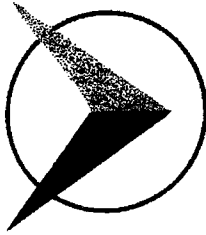
**Manufacturer:** Balloon Aloft Australia Pty L td  
199 Rodd Street  
Canowindra NSW 2804

Pursuant to Regulation 22 of the Civil Aviation Regulations this certifies that approval is hereby granted for the Thunder & Colt model AX8-90 S1 hot air balloon

This certificate is valid until suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as prescribed in Certificate of Type Approval Data Sheet Number 223-1 issued by this Authority.

N.J. Probert  
Delegate of the Authority  
Date of Issue: 16 July 1997

# COMMONWEALTH OF AUSTRALIA



CIVIL AVIATION  
SAFETY AUTHORITY  
AUSTRALIA

No.: 223-1  
Revision: 0  
Thunder & Colt  
AX8-90 S1

Date: 16 July 1997

## CERTIFICATE OF TYPE APPROVAL DATA SHEET

This data sheet, which is part of the Certificate of Type Approval No. 223-1, lists the conditions and limitations under which the balloon for which the Certificate of Type Approval was issued meets the airworthiness requirements of the Civil Aviation Safety Authority.

Manufacturer: Balloon Aloft Australia Pty Ltd  
199 Rodd Street  
Canowindra NSW 2804

**1. Model AX8-90 S1 Hot Air Balloon (Balloon Category) Approved 16 July 1997**

Envelope:	Thunder & Colt 12 gore envelope, drawing NS/S1/90/12/H/100 Issue 1.
Volume:	2550 cubic metres (90,000 cu.ft.)
Air heaters:	As listed in Thunder & Colt Ltd Build Standard D1: Thunder 90 Series 1
Baskets:	As listed in Thunder & Colt Ltd Build Standard D1: Thunder 90 Series 1
Fuel:	Commercial LPG or propane.
Maximum weight:	Gross weight limited to 900 kg, or to weight requiring a maximum continuous envelope temperature of 120 degrees Celsius, whichever is the lesser.
Maximum envelope temperature:	120 degrees Celsius.

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- Minimum Crew: One pilot
- Fuel capacity: See Note 1.
- Serial No.s eligible: See Note 4.
- Production Basis: Certificate of Approval No.2374 dated 11 April 1996 for manufacture
- Certification basis: CAO 101.54 Issue 1 dated 14 May 1985 including Amendment 95 .  
  
British Civil Airworthiness Requirements (BCAR) CAP 494 Part 31 Issue 1 dated 31 August 1984, plus CAA-BBAC letter 9/30/1PA, dated 27 February 1989.  
  
Exemptions and Variations are as specified in CASA CAR 21 Design Standard letter 97/8124 dated 16 July 1997.  
  
This certification is only applicable to balloons produced under licence agreement from Thunder and Colt (Cameron) Balloons Ltd. UK.
- Drawing list: Balloon Aloft Sealed drawing list No. AX8-90S1/1 dated 25 March 1997.
- Service Information Thunder & Colt Technical Information (Service Bulletins), that carry a statement "Approved by the United Kingdom Civil Airworthiness Authority UK CAA)" may be interpreted as CASA approved.
- NOTE 1. Fuel capacity:  
  
Balloons fitted with a single burner unit must carry at least one master tank. Additional master or slave tanks may be carried as desired by the pilot.  
  
Balloons fitted with a double or triple units must carry at least two master tanks. Additional master or slave tanks may be carried as desired by the pilot.
- NOTE 2. The maintenance and inspection requirements of Thunder & Colt Balloon Flight Manual Maintenance Section Issue, 5 dated 5/94, or subsequent UK CAA approved revisions must be followed.

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- NOTE 3.       Balloons manufactured under this approval are supplied in kit form from Thunder & Colt Ltd (Cameron) UK. Serial number is as specified on JAA Form One which must be supplied with every kit, plus the addition of "BA" (Balloon Aloft) suffix. This combined serial number is to be engraved on the envelope crown ring and data plate.
- NOTE 4.       Thunder & Colt Ltd UK CAA approved flight manual at Issue 5 dated 5/94, or subsequent UK CAA approved revision, is accepted for the purpose of CAO 101.54 paragraph 4.2 (e). As per CAO 95.53 & CAO 95.54 an approved flight manual is not required for the issue of a Certificate of Airworthiness.

- END -