

## 8.16 SINGLE AIRCHAIR

### 8.16.1 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.

Issue 1 of this supplement consists of six pages.

Supplement 7.16 (two pages) to Maintenance Manual Issue 10 is required to ensure continued airworthiness.

The Single Airchair was originally certified as a Skychariot and they can be regarded as the same product.

### 8.16.2 LIMITATIONS

#### 8.16.2.2 WEATHER

1. The balloon must not be flown in surface winds greater than 10 knots.

#### 8.16.2.10 RATES OF CLIMB AND DESCENT

1. The maximum rate of climb and descent for all types when using the Single Airchair is 800 ft/min (4 m/s).

#### 8.16.2.15 BASKETS

6. Balloons equipped with Airchairs must also be equipped with envelope turning vents to allow the airchair to be correctly orientated for landing.

### **8.16.3 EMERGENCY PROCEDURES**

No change.

### **8.16.4 NORMAL PROCEDURES**

#### **8.16.4.3 PREPARATION AND RIGGING**

Lay the Single Airchair on its back. Roll out the envelope and connect the flying wires.

The fuel hoses run down inside the rod covers and under the seat to the cylinder connections. The fuel hoses should be routed to ensure that they are protected from damage or burner heat.

The Single Airchair should be restrained during inflation.

Attach the ripline and turning vent lines to the half rings on the burner frame. Ensure that the lines are not tangled or crossed.

#### **8.16.4.4 INFLATION**

Hot inflating should be carried out by standing beside the Single Airchair and operating the burner through the side of the frame. Allow the Single Airchair to come up as the envelope rises. The pilot should sit in the Single Airchair as soon as it is upright. Attach the envelope scoop if fitted.

The safety belt should be fastened at all times the pilot is in the seat.

#### **8.16.4.5 TAKE-OFF**

##### **Pre-Take-Off Checks (additional)**

**Fuel** Fuel cylinders firmly strapped to the frame.

**Seat Belts** Seat belts fastened.

The Airchair should be rotated, if necessary, using the turning vents so that the pilot is facing the direction he will travel on take off.

#### 8.16.4.6 CONTROL IN FLIGHT

The size of the envelope makes it responsive to use of the burner and parachute.

The pilot should ensure he is familiar with the behaviour of the turning vents, by operating them during the flight, before attempting a landing.

#### 8.16.4.7 LANDING

Choose the landing field and approach it facing in the direction of travel.

At a height of about 65 feet (20 m) rotate the balloon through 90° so that the Single Airchair is travelling sideways.

At a height of about 20 feet (6 m) rotate the balloon through a further 90° so that the Single Airchair is travelling backwards.

Turn off the pilot lights.

Avoid excessively high rates of descent at the initial ground contact on landing.

On contact the Single Airchair will probably tip over backwards and begin to drag like a sledge.

Pull the ripline fully, until the Single Airchair stops.

#### 8.16.5 WEIGHT CALCULATIONS

No change.

#### 8.16.6 BALLOON AND SYSTEMS DESCRIPTION

The Single Airchair is of tubular stainless steel welded construction. The load is carried from the burner frame with four load wires which are attached to the 'J' shaped frame using quicklinks. The fuel cylinder sits in the bottom of the 'J' shaped frame and is strapped in place. The fuel system is similar to that of a conventional basket.

The Single Airchair can be equipped with either a Colt C2 Plus, Single Stratus or a Single Shadow Mini burner. The burner frame is mounted on four nylon rods, the front two being longer than the rear two. The flying wires are attached to the corners of the burner frame using karabiners.

The seat back is a leather or Cordura covered, padded panel which is attached to the frame with Velcro. The seat base is made of a plywood base padded with foam, with leather or Cordura covering. The seat is fastened to the stainless steel frame. The nylon rods have leather or Cordura padded covers.

The fuel cylinder is a bespoke horizontal 60 litre cylinder with no internal partition, which has two liquid takeoffs with quick shutoff valves. There is also a fuel gauge for use when the Single Airchair is in the upright position, a fill level and pressure relief valve. The connections may be of either the Rego or the Tema self-sealing type.

The seat belt is either a 4-point harness with a central release or a 2 point lap belt with central release. The harness should be worn at all times.

Helmet and gloves are recommended for the pilot.

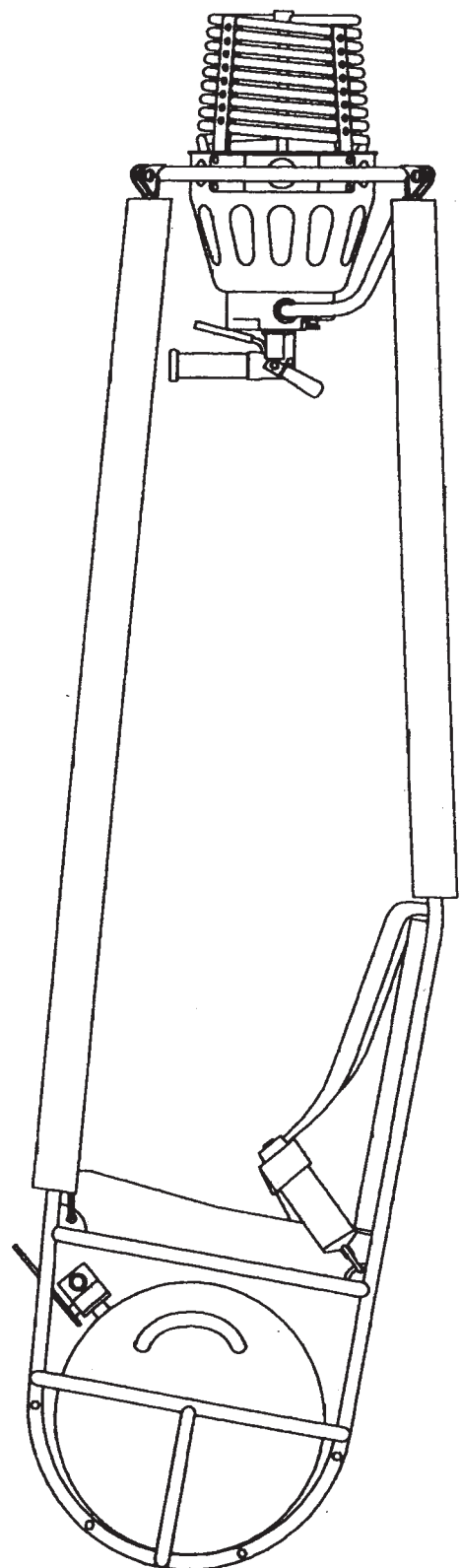
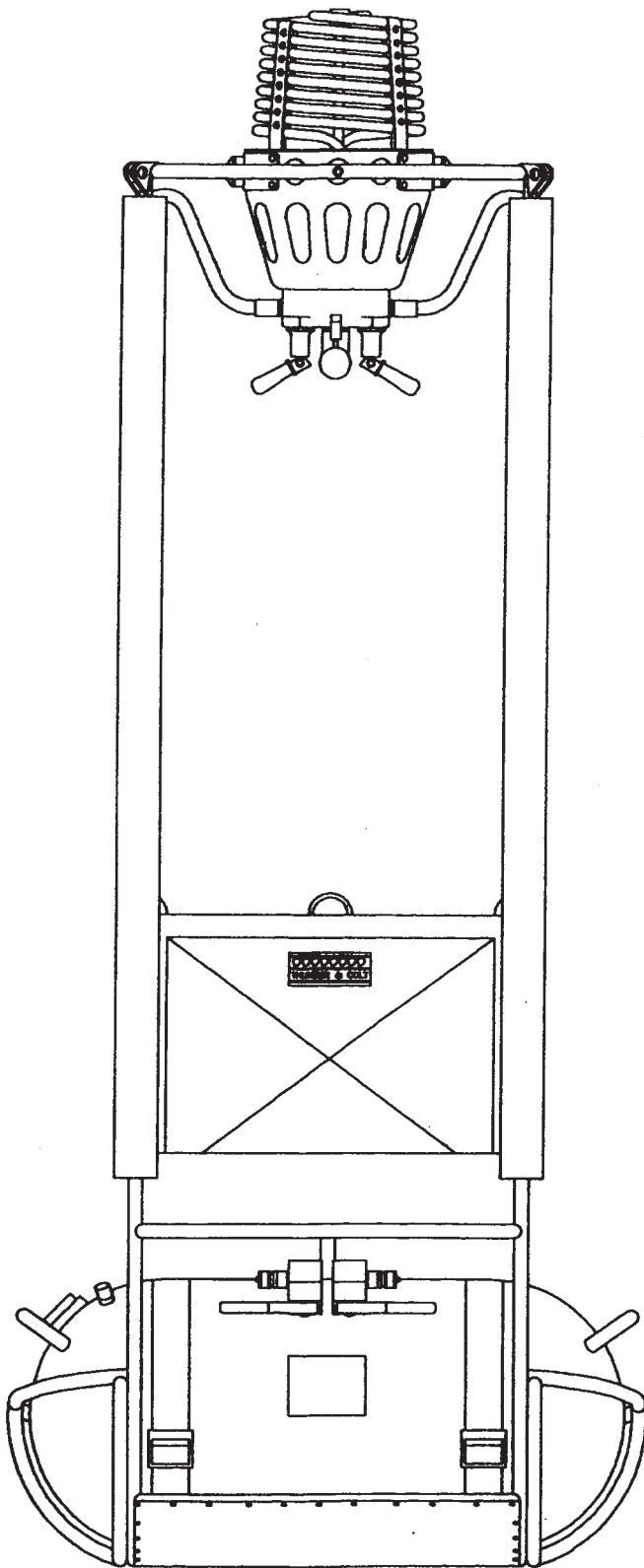
### 8.16.7 BALLOON MAINTENANCE, HANDLING AND CARE

No change.

### 8.1.9 EQUIPMENT LIST

**TABLE 5 - BASKETS (ADDITIONAL)**

Basket Category	Drawing Number	Basket Description*	Applicable Cylinders	Applicable Burner Frames
A	CB8310	SINGLE AIRCHAIR	4	SINGLE AIRCHAIR



▲ Single Airchair

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## 7.16 SINGLE AIRCHAIR

### 7.16.1 GENERAL

No change.

### 7.16.2 ENVELOPE REPAIRS

No change.

### 7.16.3 BASKET REPAIRS

No change.

### 7.16.4 FUEL SYSTEM REPAIRS

No change.

### 7.16.5 INSTRUMENT REPAIRS

No change.

### 7.16.6 INSPECTION SCHEDULE

<b>6.15 BASKET</b>		
<b>11.</b>	Check the frame of the Airchair for distortion and the welds for any signs of cracking.	
<b>12.</b>	Check the aluminium skin for damage.	
<b>13.</b>	Check seat base for signs of cracking and distortion.	
<b>14.</b>	<b>Harness-</b> Check function of buckles. Check webbing for wear, fading or damage. Check attachments are secure and free from wear or damage.	

#### 7.16.6.17.4 Baskets

**Frame-** Inspect the frame carefully paying particular attention to the condition of the welds. Check for any sign of fracture or unauthorised repairs, particularly if the frame shows signs of distortion.

**Skin-** The aluminium skin panel should be secure and free from major damage. Small dents and scoring are permissible.

**Seat-** The seat covering should be free from damage that exposes the foam padding. The plywood base should be free from distortion and cracking.

**Harnesses-** Check the physical condition of the latch mechanism. Inspect for signs of distortion or wear. Check the operation of the latch. Inspect the webbing straps for signs of wear, cuts, heat damage and UV degradation (UV degradation usually manifests itself as fading of the webbing). If the webbing has any defects it should be replaced.