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8.11 LINDSTRAND CLOUDHOPPER (MK 1) WITH CAMERON ENVELOPES

8.11.1 INTRODUCTION

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 2 of this supplement consists of 6 pages.

Supplement 7.11 to Maintenance Manual Issue 10 is required to ensure continued airworthiness.

Issue 1 of this supplement was originally approved by UK.CAA as supplement 23 to Flight Manual Issue 9 on 21 July 2003.

8.11.2 LIMITATIONS

8.11.2.2 Weather

1. The maximum surface wind speed for take off and landing of the Lindstrand Balloons' Cloudhopper is 10 knots.

8.11.2.18 Equipment Interchangeability

1. The burners and baskets manufactured by Lindstrand Balloons which may be used in combination with Cameron envelopes are listed in Section 8.11.9 of this supplement.

8.11.3 EMERGENCY PROCEDURES

8.11.3.8 Preparation For A Hard Landing

To reduce the severity of the impact avoid any use of the parachute vent and jettison any surplus weight. Absorb the landing impact parachute style with legs together and knees bent.

8.11.3.10 Burner Failure

1. Shut off the pilot light at the regulator on the burner block.
2. Prepare for a hard landing (Section 8.11.3.8).

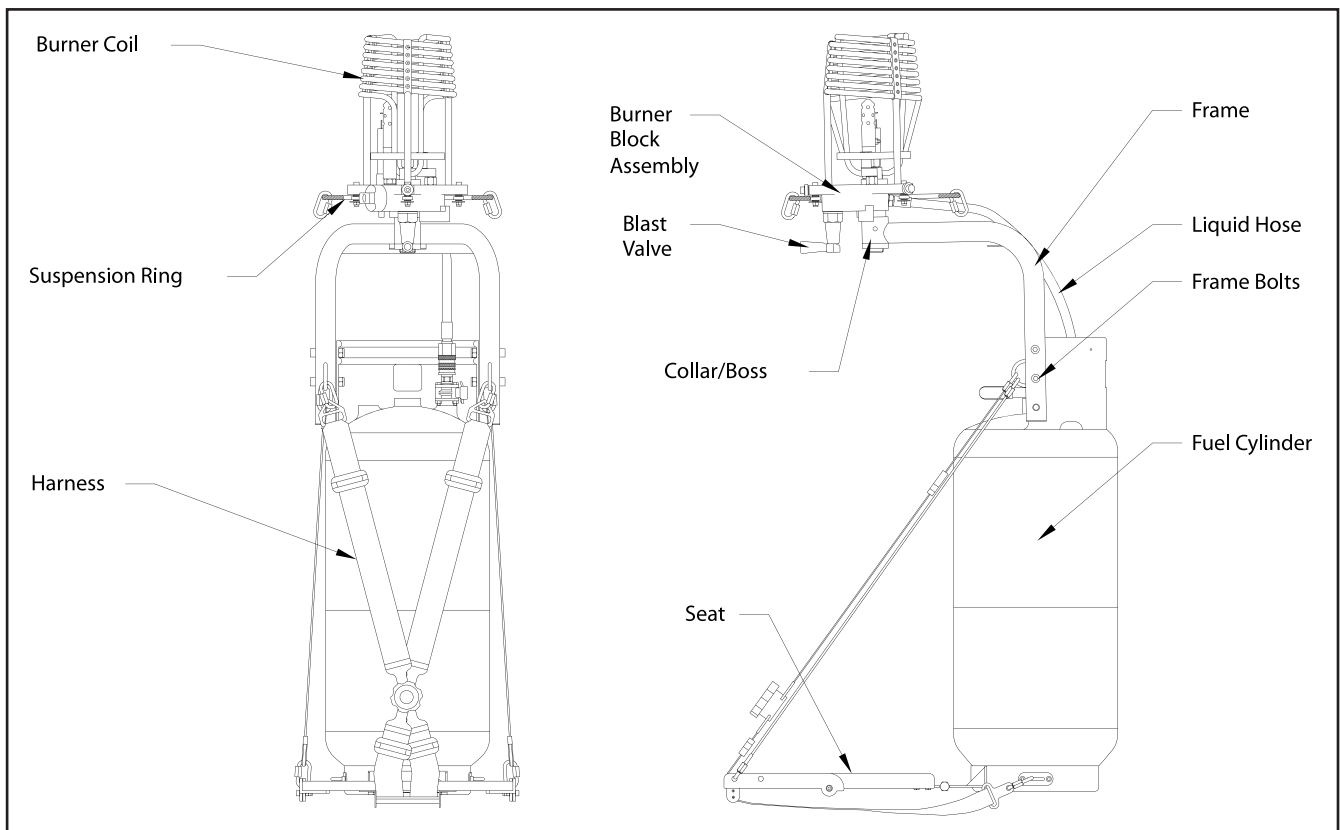
8.11.3.11 Pilot Light Failure

If the pilot light fails the following procedure should be adopted-

1. Shut off the pilot light.
2. Switch changeover lever to main burner.
3. Partially hold open the burner valve.
4. Light the burner with an onboard ignitor.

WARNING: Do not use the ignitor built into the burner, as it will not ignite the fuel.

5. Use the main burner to control the flight of the balloon whilst maintaining a pilot light setting between burns.
6. Land as soon as possible.



▲ Lindstrand Cloudhopper

8.11.4 NORMAL PROCEDURES

8.11.4.3 PREPARATION AND RIGGING

The burner unit is stored during transportation in an inverted position within the load frame. To install the burner in the flight position, remove the pip pin from the main collar and unscrew the thumbwheel. Remove the burner block assembly from the frame, invert it and re-insert it into the opposite side of the collar. Rotate the burner unit until the alignment lug permits the burner assembly to be inserted fully into the collar. Replace the thumbwheel on the lower threaded portion and insert the pip pin through the hole in the collar. If the pip pin cannot be inserted completely through the collar, the burner unit is not correctly aligned.

Mount the load frame onto the fuel cylinder so that the burner unit is situated above the seat. Insert the four bolts through the appropriate holes in the lower legs of the frame and the matching holes in the sides of the fuel cylinder. Tighten the nuts on to the bolts. Connect the liquid feed hose on to the liquid withdrawal valve. First ensure that the main operating valve and the pilot light valve on the burner unit are off. Turn on the liquid supply valve on the top of the fuel cylinder. Check that each of the fuel connections are gas tight by looking, listening and smelling. If there are no leaks, open the pilot light valve by rotating the handle on the right hand side of the burner block. Ignite the pilot light and conduct a burner test in the normal manner. Once the burner test has been successfully completed, close the cylinder valve and vent all remaining fuel through the burner.

Lay the Cloudhopper unit over so that it is lying on its side. Connect up each of the Quicklinks, which are situated on the ends of the flying wire groups, on to the aluminium load ring. Ensure that none of the flying wires are crossed or twisted.

8.11.4.4 INFLATION

Cold and hot inflate the envelope. It is recommended that the main burner is used for hot inflations because the flame pattern is less susceptible to crosswinds. The main burner is selected by positioning the selector valve on "MAIN", engraved on the burner block. The liquid fire is selected by positioning the selector valve on "LF".

Once the balloon is inflated, have an assistant hold the Cloudhopper frame down while the pilot sits on the seat. Secure the harness in place so that a strap is over each shoulder and the two lower straps pass through the legs. Tighten the straps until a comfortable, secure position is achieved.

8.11.4.6 CONTROL IN FLIGHT

The Cloudhopper bottom end can rotate independently of the envelope. This is achieved by the pilot reaching up and grasping either the edge of the aluminium ring or the flying wires, and rotating themselves in the desired direction.

8.11.4.6.3 Fuel Management

The remaining fuel may be discovered by looking upwards onto the reflective plate that is situated above the pilot's head. The contents gauge can be seen in the reflection.

8.11.4.7 Landing

Use the legs to absorb some of the downward velocity if the wind conditions are light. If a fast landing is anticipated, do not attempt to use the legs. Let the bottom of the cylinder and seat absorb the landing impact and prepare for the resulting drag to be on the side.

8.11.5 WEIGHT CALCULATIONS

No change.

8.11.6 BALLOON AND SYSTEMS DESCRIPTION

8.11.6.3 BURNER

Refer to the equipment list in section 8.11.9 of this supplement.

8.11.6.4 FUEL CYLINDERS

Refer to the equipment list in section 8.11.9 of this supplement.

8.11.6.5 BASKET

Refer to the equipment list in section 8.11.9 of this supplement.

8.11.7 BALLOON MAINTENANCE, HANDLING AND CARE

Clean the frame and harness and cylinder regularly. If muddy, allow to dry and brush away with a stiff brush.

CAUTION: NEVER clean the harness with strong solvent cleaners or other chemicals.

CAUTION: NEVER leave the harness wet or damp for prolonged periods.

8.11.9 EQUIPMENT LIST

8.11.9.2 Equipment List

The table below lists the Lindstrand Cloudhopper (MK 1) variants which may be used with Cameron envelope types.

Basket Cat.	Drawing Number	Basket Description	Cylinder Drawing Number	Cylinder Model	Applicable Burner Frames
A	Lindstrand BA-300-A-001	Lindstrand Cloudhopper	Lindstrand CY-011-A-001	Cloudhopper Worthington	Intergral
A	Linstrand BA-300-A-217	Lindstrand Cloudhopper	Lindstrand CY-031-A-001	Cloudhopper V30 Cylinder	Intergral

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