

The technical content of this document is approved under the authority of DOA ref. UK.21J.0140 (C872)

8.62 ULTRAMAGIC TEKNO BASKET

8.62.1 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.

Data for this supplement has been taken from Ultramagic MV Supplement 39, Issue 11.

Issue 2 of this supplement consists of 6 pages.

Supplement 7.7 to Maintenance Manual issue 10 and Ultramagic Maintenance Manual Supplement 18 issue 4 or later approved revision are required to ensure continued Airworthiness.

8.62.2 LIMITATIONS

8.62.2.5 PERMITTED DAMAGE

7. Damages or cuts on the fabric walls is limited to holes or tears smaller than 50mm (2") in any direction. Damage must not be so widespread that the integrity of the fabric wall is jeopardized.
8. No cracks or damage are allowed on the steel structure.
9. No crack in the plywood floor may be longer than 15 cm and greater than 3 mm depth (two cross-banded veneers).

8.62.2.7 CREW

1. The maximum number of occupants is shown in Table 1.

8.62.2.9 WEIGHT RANGE

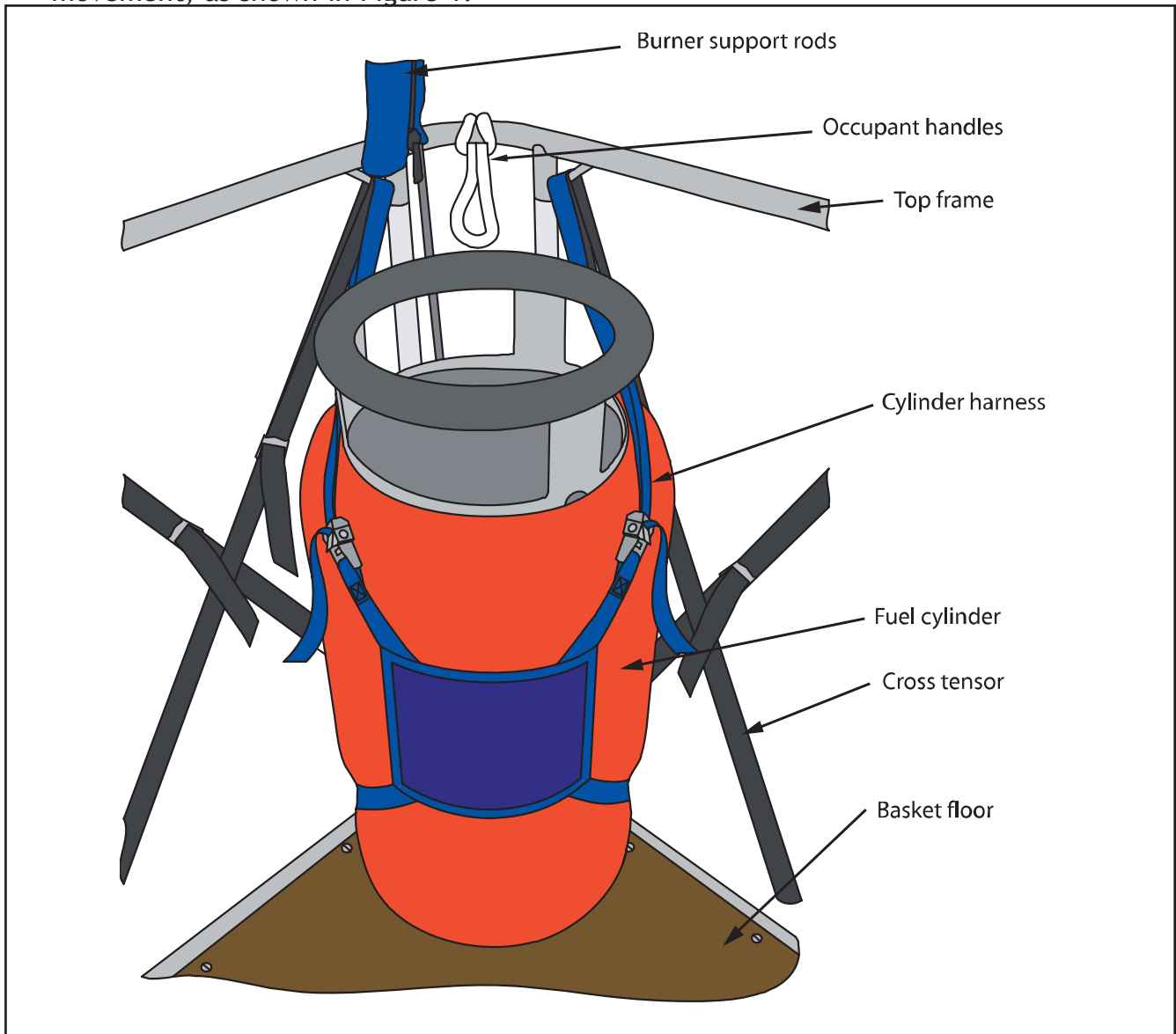
1. The take-off Mass (TOM) of the balloon must never exceed the Maximum TOM (MTOM) shown in table 1. The applicability of the MTOM, either Standard or Reduced is given on page i-i of the main manual.

8.62.2.5 TETHERED FLIGHT (ADDITIONAL)

Tethered flight is not permitted if the surface wind speed is greater than 10 knots (7.7 m/sec)

8.62.2.16 CYLINDERS

- For cylinders installed inside the basket, the cross-harness supplied must be fitted to each cylinder. The harness should be fixed so as to prevent vertical and lateral movement, as shown in Figure 1.

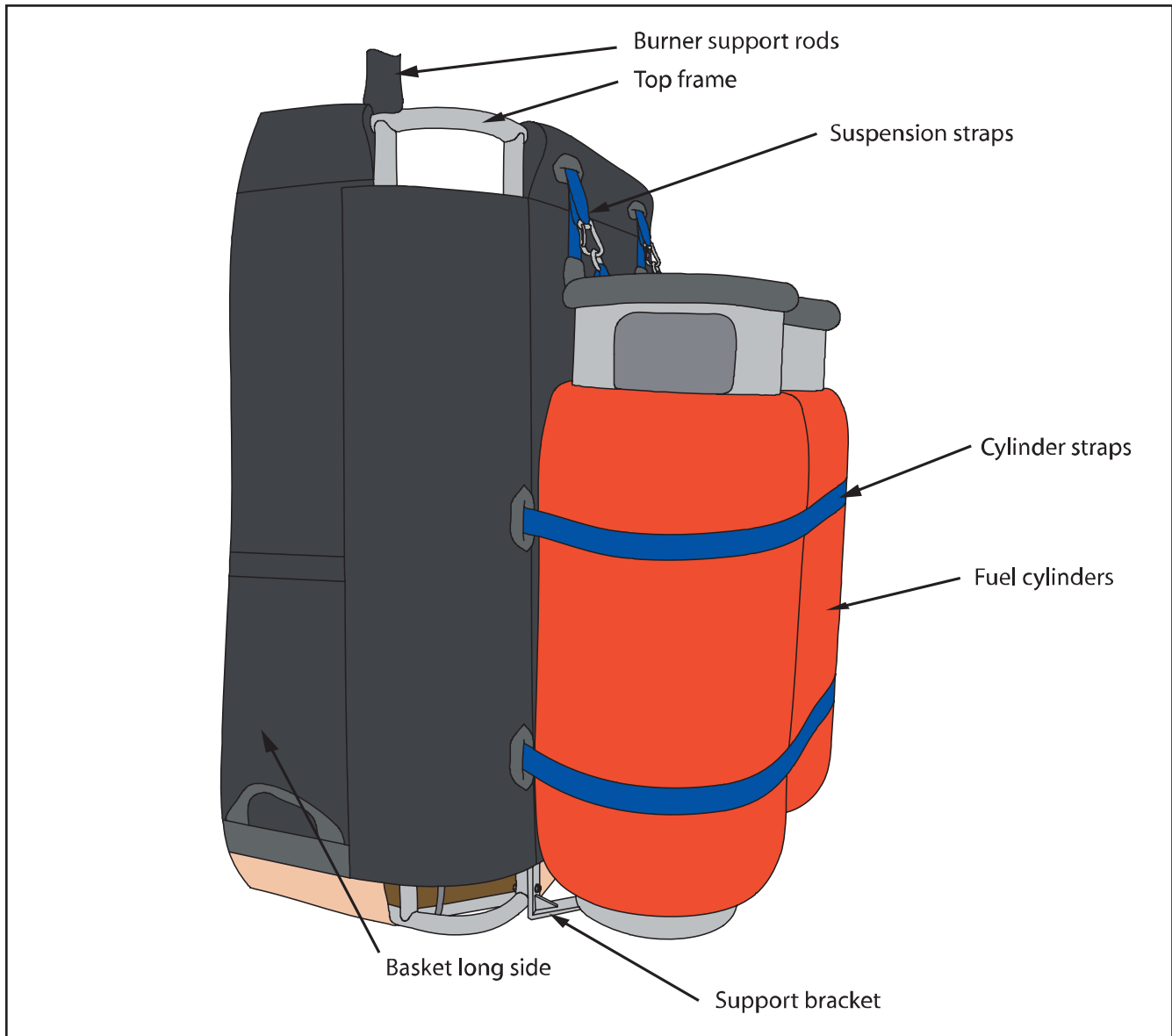


▲ Fig 1. Cylinder installation inside the basket

- When optional external support brackets for fuel cylinders are installed, 2 or 4 cylinders may be carried in pairs on the short sides of the basket. Each pair of cylinders must be fitted using two horizontal straps, two support brackets and the two

suspension straps provided on the basket top frame, as shown on Figure 2.

4. Flight with the optional external support brackets for fuel cylinders fitted is prohibited if external cylinders are not fitted to it.
5. Only M-20, M-20D, M-30, M-30D or Worthington cylinders, or a combination of them, may be installed externally to the 'Tekno' basket. Only cylinders of the same type may be mounted together externally on the same side of the basket.



▲ Fig 2. Cylinder installation outside the basket

Table 1: Envelope Weight Limits and Volumes (Additional)

Variant	Volume		Standard MTOM						Reduced MTOM	
			CT-01		CT-02		CT-03		All	
	ft ³	m ³	kg	lb	kg	lb	kg	lb	kg	lb
56	56 000	1586	508	1120	508	1120	508	1120	499	1100
60	60 000	1700	544	1200	544	1200	544	1200	499	1100
65	65 000	1841	545	1202	590	1300	590	1300	499	1100
69	69 000	1954	545	1202	626	1380	626	1380	499	1100
70	70 000	1982	545	1202	635	1400	632	1393	499	1100
77	77 000	2195	545	1202	703	1550	632	1393	499	1100
80	80 000	2266	545	1202	726	1600	632	1393	499	1100
84	84 000	2379	545	1202	762	1680	632	1393	499	1100
90	90 000	2549	545	1202	807	1779	632	1393	499	1100
100	100 000	2832	545	1202	807	1779	632	1393	NA	NA
105	105 000	2974	545	1202	807	1779	632	1393	NA	NA
120	120 000	3398	545	1202	807	1779	632	1393	NA	NA
133	133 000	3767	545	1202	807	1779	632	1393	NA	NA

8.62.2.4 Minimum Burner Requirements

‘Tekno’ baskets are approved for flight using the following burners:

- MK-21 Single
- BMK-008 Single
- MK-21 Double (only CT-02 and CT-03)
- BMK-008 Double (only CT-02 and CT-03)
- MK-32 Double (only CT-02 and CT-03)

8.62.3 EMERGENCY PROCEDURES

No change.

8.62.4 NORMAL PROCEDURES

8.62.4.2.2 (Additional) Assembling the Tekno Basket

The ‘Tekno’ basket is supplied with a transportation bag specially designed to protect the components during handling and storage, as well as to allow a neat organisation of its parts. To assemble the basket, proceed as follows:

- Deploy the body of the basket over a flat surface. Make sure that the basket floor is underneath.
- Take 8 white rods from the bag and fit each end in the sockets of the basket bottom

structure.

- Lift up the top frame and position the upper end of the rods in its sockets.
- With the main structure up, unfold the wall panels out of the basket, and put the fuel cylinders into the basket.
- A set of 8 tapes fitted with buckles is provided.
- Pass each cross tensor tape in a diagonal joining the two loops on opposite corners of each side wall of the basket, leaving them a bit loose. Make sure that their buckles are not entangled. Repeat the operation with all the tapes. Finally tighten firmly the 8 cross tensor tapes.
- Using the harness arrangement provided, attach firmly the cylinders to the corners as per 8.62.2.16(2), paying attention to the balance of the basket. Secure the two carbine hooks to the bottom corner brackets.
- Lift the panels up and attach them around the top frame by means of the two Velcro tapes provided. Make sure the panel and the fixings are tight.
- Unfold the corner covers of each straight panel and tighten them over the walls of the long side by using the Velcro bands.

CAUTION: The whole structure must remain inside the boundary formed by the fabric walls, with the exception of the external fitting for fuel cylinders (if used).

CAUTION: Do not manipulate the Velcro tapes or bands while refuelling the cylinders inside the basket as sparks from electrostatic discharge may occur.

8.62.4.2.2 (Additional) Installation of external cylinders (optional)

If the 'Tekno' basket is provided with external fittings for fuel cylinders, the pilot must install 2 or 4 cylinders on them. To install the fuel cylinders, refer to Figure 2 and proceed as follows:

- Make sure that the cylinder support brackets located at the basket bottom edge are not damaged and are firmly secured to the basket sockets.
- Place each cylinder over a bracket checking that the bracket hook joins the cylinder bottom ring.
- For CT-02 fuel cylinders fitted externally, place and secure the padded spacer provided.
- Secure all cylinder suspension straps, rigging their Carbine hook to the ring placed at the end of the strap. Make sure that the cylinder top ring is engaged.
- Fasten the horizontal straps around the cylinders installed on one side of the basket. Note that these straps must be passed through the holes of the basket corners, lacing the cylinders to the adjacent wall and nylon rods.

NOTE: Observe the limitations listed on 39.2.13.
Information regarding to the assembly or removal of the external support brackets may be found in Supplement 18 to the Ultramagic Maintenance Manual

– Proceed with the rigging as per section 4.2.2 of the Flight Manual.

8.62.4.3 INFLATION

Pre-inflation Checklist (Additional)

Check the general condition of the basket for damage

Check the diagonal cross-tensor tapes are correctly fitted and tightened.

Baskets:

Check that the wall panels are firmly closed and secure

Check that the external fuel cylinders, if fitted, are mounted correctly

Pre-inflation Checklist (additional)

8.62.4.6.4 Folding the ‘Tekno’ Basket

To fold the basket follow the steps of 8.62.4.2.2 in reverse order.

If the basket has suffered a hard landing, follow section 6.7.3 of the Ultramagic Maintenance Manual MM 04 and Supplement 18 before next flight.

8.62.3 WEIGHT CALCULATIONS

No change.

8.62.6 BALLOON AND SYSTEMS DESCRIPTION

Basket	Length*	Width	Wall Height	Empty Mass*	Min Karabiner Strength
	m	m	m	kg	kN
CT-01	1.0	0.8	1.1	35	0.9
CT-02	1.2	1.0	1.1	49	2.5
CT-03	1.2	0.8	1.1	38	0.9

8.62.6.5.7 Dimension and Weights

* Fuel Cylinders, burner and burner frame not included.

8.62.7 BALLOON MAINTENANCE, HANDLING AND CARE

No change.