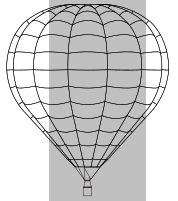


FLIGHT MANUAL SUPPLEMENT 54

External Fuel Cylinders

"Issue No. 1 to AFM Supplement No. 54 is approved by EASA (10049619)"



S 5 4 E X T E R N A L F U E L C Y L I N D E R S

54.1 General Information

This supplement details the instructions and limitations necessary to ensure the correct operation, maintenance and continued airworthiness of baskets carrying external fuel cylinders.

The section indexes on this supplement are preceded with the §54.X, and the suffix is kept in line with the Ultramagic Flight Manual. The content of this supplement replaces or appends the information contained on the Flight Manual for the balloon or parts to which this supplement is intended.

54.2 Limitations of use

The following limitations replaces those already stated in the Flight Manual.

54.2.6 Loading

Applicable loading parameters are listed on section 54.5 of this supplement.

54.2.11 Baskets

54.2.11.3 – External fuel cylinders must only be installed in baskets complying with the major modification Nr.31 approved by EASA project 10049619. This major change involves the C-0, C-1, C-2 and C-3 baskets.

54.2.13 Fuel Cylinders

2 – For cylinders installed outside the basket, at least one suspension strap per cylinder is to be attached to the basket top frame dedicated attachment points. In addition to the standard two horizontal straps, a third horizontal strap must be used to attach the bottom collar of the cylinder to the basket wall. Figure 1 and Figure 2 show the correct installation of a single and a couple of cylinders on a wicker basket.

4 – The cylinders installed outside the basket must have the lower skirt edges protected with an edge trimmer as per minor modification Nr.173.

5 – The use of the cylinder's upper ring padding is optional when carrying the cylinders outside the basket.

6 – The use of different sizes of cylinder in the same wall side is allowed.

54.2.15 Other Manufacturers Equipment

Other manufacturers equipment is listed on section 54.8 of this supplement.

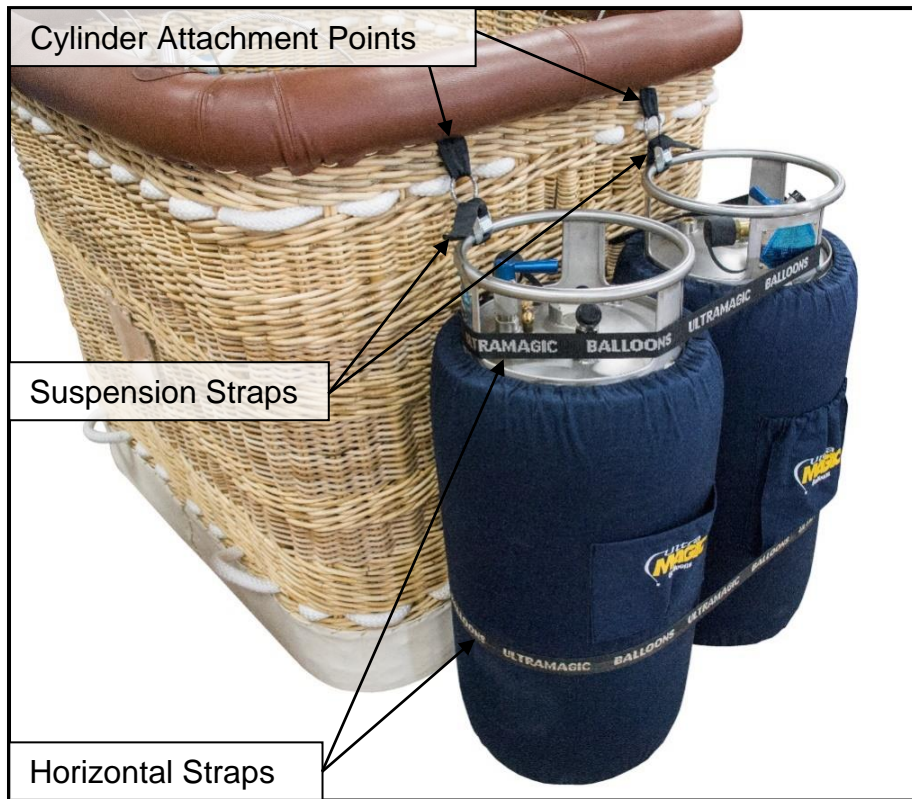
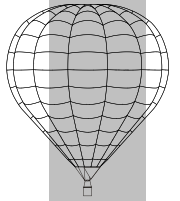


FIGURE 1



FIGURE 2

54.3 Emergency procedures

No change.

54.4 Standard procedures

54.4.5 Preparing the aerostat for flight

54.4.5.1.4 Basket

Proceed as per 54.4.5.5 and refer after to 54.C for specific pre-flight checks.

54.4.5.5 Installation of External Cylinders

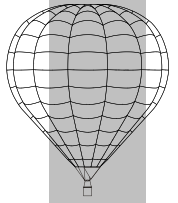
If the basket is provided with attachment points for the use of external fuel cylinders, pilot may install up to 4 cylinders on it depending on the size of the basket. To install the fuel cylinder/s refer to Figure 1 and proceed as follows:

- Make sure that the external fuel cylinder attachment points located just under the basket padding and leather trim are not damaged and are firmly secured to the basket top frame structure.
- Fasten each cylinder suspension strap to the external cylinders attachment points. Make sure that the cylinder top ring is engaged as it is shown in Figure 3.



FIGURE 3

- Make a simple knot with the end tip of the suspension strap as it is shown in Figure 4. Do not tight it too much.



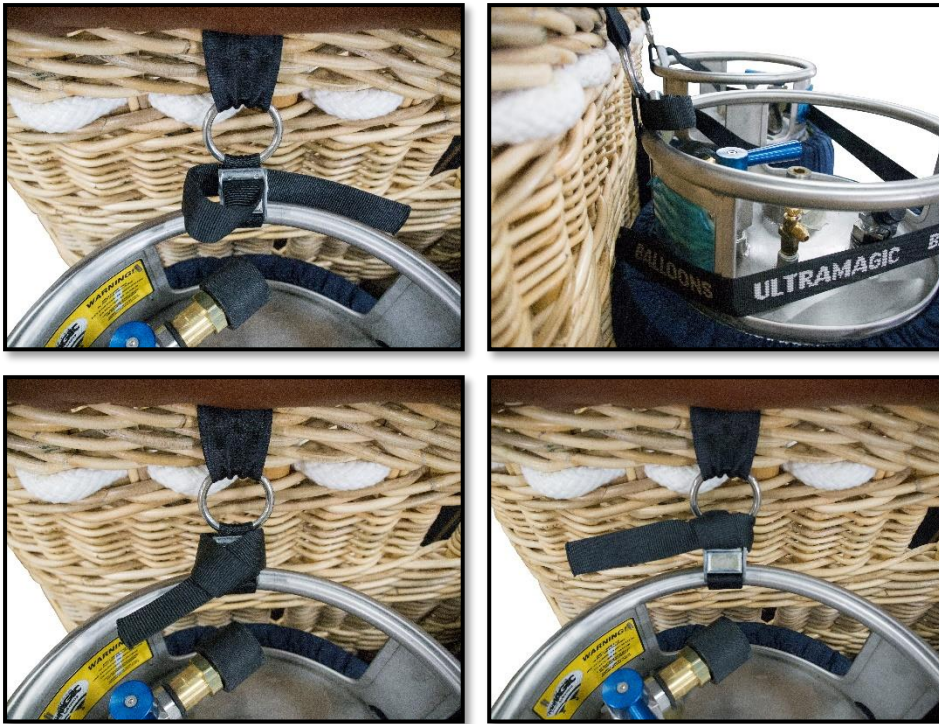
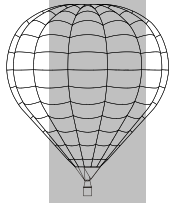


FIGURE 4

- Fasten the bottom horizontal strap through the lower skirt of the cylinder/s. Make sure that the cylinder/s lower ring/s is/are engaged as it is shown in Figure 5. Note that the strap must go through the lower holes of the basket wall as it is shown in Figure 6.



FIGURE 5

- Fasten the horizontal straps around the cylinders installed on one side of the basket. Note that these straps must go through the holes of the basket wall as it is shown in Figure 6. Make sure that the upper strap is routed as shown in Figure 1 and Figure 2.

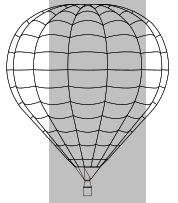


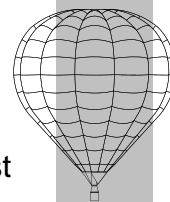
FIGURE 6

- When routing the fuel hoses through the wall allow always some extra length to the hose as it is shown in Figure 7.



FIGURE 7

NOTE: Observe the limitations listed on 54.2.13.



54.5 Loading

54.5.7 Basket Loading

When flying with external cylinders the maximum load of the basket must be no more than the least of:

- the maximum authorised weight engraved on the basket plate; or
- 650 kg.

54.6 Balloon and Systems Description

No change.

54.7 Balloon Maintenance, Handling and Care

Follow instructions as per Maintenance Manual.

54.8 Other manufacturer's equipment

Cylinders from other manufacturers must not be used as external fuel cylinders. Only M-20/M-20D and M-30/M-30D Ultramagic fuel cylinders are to be used as external fuel cylinders.

54.C Quick Reference Pre-flight Checklist

Replace Basket pre-flight checklist with the following:

Basket

1. ☐ Check the general condition of the basket for damage.
2. ☐ Ensure that the basket wires are free of damage and twists.
3. ☐ Ensure that the burner frame and poles fit correctly and are free of damage.
4. ☐ Ensure that the attachment points are secure and that all karabiners are screwed locked.
5. ☐ Check for the presence of a fire extinguisher in state of readiness.
6. ☐ Check that cylinder straps are in place and cylinders are secured.
7. ☐ If fitted, check that the external fuel cylinders are mounted as per 54.4.5.5

54.D Minimum Basket Space Requirements

The following table appends the already existing one:

		Number of Cylinders			
		M-20		M-30	
		0	1	0	1
Basket Type	C-0	1	1	1	1
	C-2	3	3	3	3
	C-1	4	3	4	3
	C-3	5	4	5	4