## FLIGHT MANUAL SUPPLEMENT 42 Special Shape F-34 "Metten"

### 42.1 General Information

In this supplement are introduced the particular characteristics and limitations of the hot air balloon special Shape F-34 "Metten".

It will be kept the same numbering of the different sections with the $\S 42 . \mathrm{X}$ to know at which sections correspond of the Main Manual, accepting they are substituted or appended by the indicated in this supplement.

### 42.2 Limitations of use

F-34 Special Shape will have the vertical speeds of ascent and descent and the Maximum Wind speed at Take Off limited in the following manner:

| Model | Vmax Ascent | Vmax Descent | Max Wind Speed |
| :---: | :---: | :---: | :---: |
| F-34 | $3 \mathrm{~m} / \mathrm{s}$ | $3 \mathrm{~m} / \mathrm{s}$ | 10 Knots |

### 42.3 Emergency procedures

No change.

### 42.4 Standard procedures

No change.

### 42.5 Loading

### 42.5.2 Table of Empty Weight and Maximum Lift

For the calculations in the Load Chart of chapter 5 of the Flight Manual will be used the following characteristics:

| Model | V | Basket | Pv | Lmax |
| :--- | :---: | :---: | :---: | :---: |
| F-34 | 3400 | C-1 | 278 | 1173 |
|  |  | C-3 | 298 | 1173 |
|  |  | C-4 | 317 | 1173 |
|  |  | C-10 | 307 | 1173 |

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\(\mathrm{V}=\) Effective volume [ \(\mathrm{m}^{3}\) ]
\(\mathrm{Pv}=\) Empty weight (without any cylinder) [Kg]
Lmax \(=\) Maximum authorised Lift \([\mathrm{Kg}]\)
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42.5.4 Table of Compatibility
SIZE ..... F-34
BURNERS
BMK-008 Double ..... *
MK-21 Double ..... xBASKETSC-1x
C-3 ..... xC-4*C-10x
ROT. VENTS ..... *
FDS ..... *MIN.CYL.2

### 42.6 Balloon and Systems Description

See following table corresponding to mass and dimensions:
SERIES $F$

| Type | F-34 |
| :--- | :---: |
| Vol. $\left(\mathrm{m}^{3}\right)$ | 3892 |
| Effective vol. $\left(\mathrm{m}^{3}\right)$ | 3400 |
| Number of gores | 24 |
| FAI class | AX-9 |
| Total height (m) | 23.6 |
| Standard basket | $\mathrm{C}-4$ |
| Weight in Standard <br> configuration (Kg) | $374^{*}$ |
| Envelope |  |
| Height (m) | 19.9 |
| Max Diameter (m) | 26.4 |
| Diameter at the Mouth (m) | 3.8 |
| Weight (Kg) | 198 |
| Parachute |  |

Diameter (m) 6.5

* incl. 2 M-30D cylinders at 10\%, C-4 basket, MK-21 double burner/frame, envelope and minimum equipment


### 42.7 Balloon Maintenance, Handling and Care

## Annual Inspection or every 100 hours (Type B)

All revisions will be type $C$.

### 42.8 Other manufacturer's equipment

Add the following:
Consider the F-34 "Metten" as an Ultramagic envelope of $120.000 \mathrm{ft}^{3}$ for eligibility purposes. A maximum Lift of 1173 kg must be applied.
42.A Vertical Velocities and Altitude Recovery

Add following graph:


[^0]
[^0]:    Legal advice: METTEN is a trademark of Metten Fleischwaren GmbH \& Co. KG

