## FLIGHT MANUAL SUPPLEMENT 27

 Special Shape F-31 "Mazorca Dekalb"
### 27.1 General Information

In this supplement are introduced the particular characteristics and limitations of the hot air balloon special Shape F-31 "Mazorca".

It will be kept the same numbering of the different sections with the §27.X to know at which sections correspond of the Main Manual, accepting they are substituted or appended by the indicated in this supplement.

### 27.2 Limitations of use

F-31 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-31 | $3 \mathrm{~m} / \mathrm{s}$ | $3 \mathrm{~m} / \mathrm{s}$ | 7 Knots |

### 27.3 Emergency procedures

No change.

### 27.4 Standard procedures

Additionally check that all Velcro rips indicated in fig. 1 are closed before hot inflation.


### 27.5 Loading

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-31 | 3.400 | C-1 | 363 | 990 |
|  |  | C-3 | 383 | 990 |
|  |  | C-10 | 392 | 990 |

$\mathrm{V}=$ volume [ $\mathrm{m}^{3}$ ]
$\mathrm{Pv}=$ Empty weight (without any cylinder) [Kg]
Lmax $=$ Maximum authorised Lift $[\mathrm{Kg}]$

F-31 envelope must be flight using one of the following burners:

- MK-10 Double
- MK-21 Double
- BMK-008 Double


### 27.6 Balloon and Systems Description

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

| SERIES F |  |
| :--- | :---: |
| Type | F-31 |
| Vol. $\left(\mathrm{m}^{3}\right)$ |  |
| Effective vol. $\left(\mathrm{m}^{3}\right)$ | 4.744 |
| Number of gores | 3.400 |
| FAI class | 24 |
| Total height (m) | AX-10 |
| Standard basket | 24,30 |
| Weight in Standard |  |
| configuration (Kg) | 363 |
| Envelope |  |
| Height (m) | 20,52 |
| Max width (m) | 24.62 |
| Diameter at the | 3.80 |
| Mouth (m) |  |
| Weight (Kg) | 255 |
| Parachute |  |
| Diameter (m) |  |

### 27.7 Balloon Maintenance, Handling and Care

Annual Inspection or every 100 hours (Type B)
All revisions will be type C and will be chosen additionally the following areas for the Grab Test prescribed:

- Upper area on corncob appendix.
- Upper area on the wings.


### 27.8 Other manufacturer's equipment

No change.

