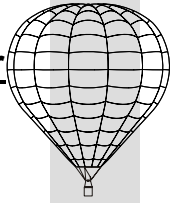


9.13 Flight Manual supplement – The Use of Raven-Aerostar Basket, Burners and Cylinders with Ultramagic envelopes.



9.13.1 General Information.

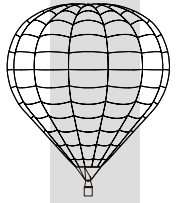
This supplement is issued to cover additional actions to be taken to safely and efficiently use Raven - Aerostar baskets, burners and cylinders with Ultramagic envelopes.

9.13.2 Limitations

9.13.2.6 Loading

The maximum take off mass is limited by certain basket types as shown in the following table. This figure must not be exceeded or the limit determined with the use of the load chart in Flight Manual section 5.2, whichever is the lower.

Envelope Volume (m3)	Basket Type	Maximum take off Mass (Kg)
900	ELS & ELSS	363
1600	ELS & ELSS	522
1600	RWS	500
1850	ELS&ELSS	522
1850	RWS	560
1850	CW , CW-AFX & RWS	636
2200	ELS & ELSS	545
2200	RWSW, RWSW-AFX, CW, CW-AFX & RWS	652
2550	ELS & ELSS	545
2550	RWSW, RWSW-AFX, CW, CW-AFX, CWS & RWS	750
3000	RWSW, RWSW-AFX, CW, CW-AFX, CWS & RWS	818
3400 - 3700	CWS & RWS	909
3400 - 3700	RB5 & RB6	1011
3700 - 5100	CWS	909
3700 - 5100	RB5	1045
3700 - 5100	RB6	1136
3700 - 5100	RB8	1204
6000	RB6	1272
6000	RB8	1568
7000	RB6, RB8, TWX & NC5	1516
5100-7000	RB12	1564



9.13.2.15 Other manufacturers equipment.

The burners, baskets and cylinders manufactured by Raven – Aerostar which may be used in combination with Ultramagic envelopes are listed in section 9.13.8

9.13.3 Emergency Procedures

9.13.3.2 Pilot Light Failure

Ensure that the pilot light valves are turned on at the cylinder and the burner and attempt to relight the pilot light with the igniter.

If after two to three attempts the pilot light cannot be re-lit then carry out the following procedure.

Open the metering valve to allow a slow fuel flow and immediately ignite to provide a temporary pilot light.

Land as soon as possible.

If no re-light at all is possible prepare for an emergency landing, see Section 3.7 Emergency landing.

9.13.4 Normal Procedures

9.13.4.5.4 Envelope Attachment to Raven - Aerostar bottom ends.

See figure 1. for envelope attachment for 2 point attachment bottom ends.

See figure 2. for envelope attachment for 4 point attachment bottom ends.

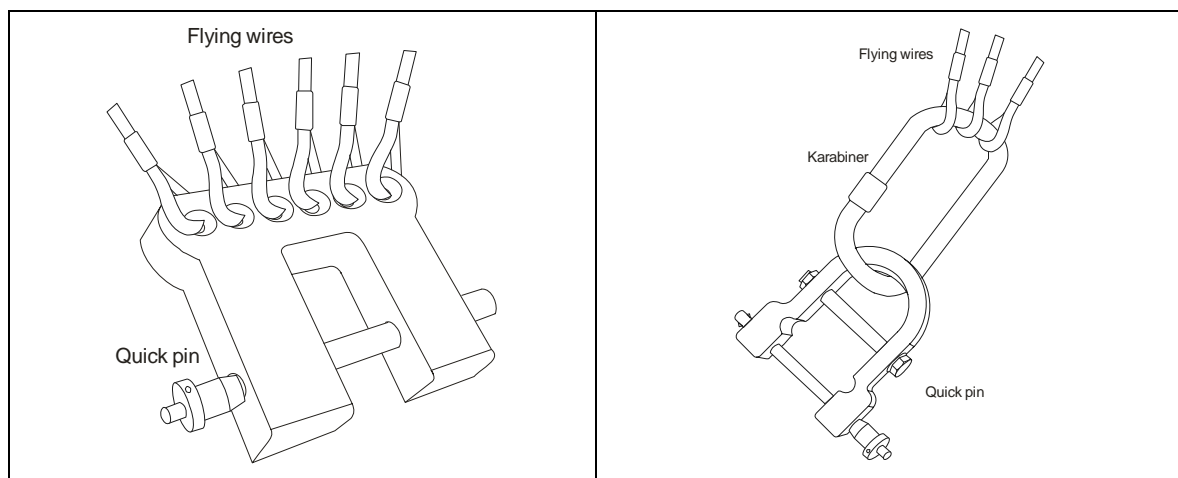


Figure 1

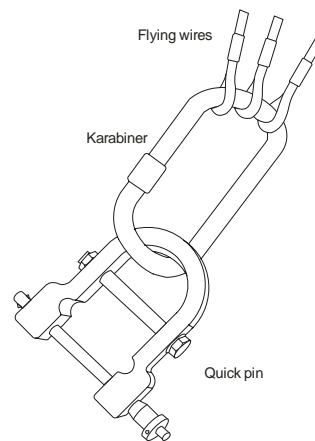


Figure 2

9.13.5 Loading

No change

9.13.6 Balloon and Systems Description

Refer to the applicable Raven – Aerostar Flight Manual

9.13.7 Balloon Maintenance, Handling and Care

Add.

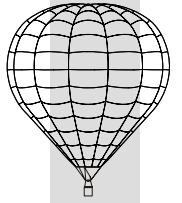
Refer to the applicable Raven – Aerostar Flight and Maintenance Manuals

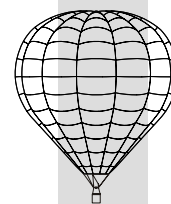
9.13.8 Other Manufacturers Equipment.**9.13.8.3**

Add the following.

RAVEN - AEROSTAR
BASKETS BURNERS and CYLINDERS

Basket Size (cm)	Type	Empty Weight (Kg)	UM Envelope size range
102 X 80	ELS	40	65-90
121 X 80	ELSS	54	65-90
122 X 107	RWS, RWSW & RWSX- AFX	60	77-105
145 X 119	CW & CW- AFX	95	65-140
168 X 119	CWS	101	90 - 170
173 X 119	RB5	132	130 - 170
178 X 127	RB6	148	130 - 250
193 x 127	TWX	148	130 - 250
231 X 127	RB8	179	160 - 250
230 x 160	NC5	175	160 - 250
246 x 141	RB12	193	180 - 250





RAVEN - AEROSTAR
BASKETS BURNERS and CYLINDERS

Burner Type		Weight (Kg)	UM Envelope size range
Aurora S	Single	11	31 - 90
HPIII S	Single	12	65 - 105
HPIII D	Dual	21	65 - 170
HPIII T	Triple	30	160 - 170
HP6D/HP5D	Double	21	56 - 250
HP6S/HP5S	Single	12	56 - 105
HP6E/HP5E	Double	22	56 - 250
HP6T	Triple	30	160 - 250

Cylinder Type	Full weight (KG)	Fuel capacity (US gallons at 85% fill)	Basket range
15 gallons stainless steel (V-15)	50.5	15	Refer to applicable Aerostar - Raven Flight Manual
18 gallons stainless steel (V-18)	57.5	18	Refer to applicable Aerostar - Raven Flight Manual
20 gallons stainless steel (H-20)	63.0	20	Refer to applicable Aerostar - Raven Flight Manual
23.5gallons stainless steel (V-23)	74.0	23.5	Refer to applicable Aerostar - Raven Flight Manual
25 gallons stainless steel (H-25)	79.3	25	Refer to applicable Aerostar - Raven Flight Manual

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