

LINDSTRAND TECHNOLOGIES LTD

FLIGHT MANUAL SUPPLEMENT NO. 2

SPECIAL SHAPED ENVELOPES

1.0 GENERAL

1.1 INTRODUCTION

This Supplement covers the Series Special range of envelopes. Where operational limits differ from Series 1, Series 2 and Series Racer, they will be listed in the tables within the Supplement. If there are no differences from the main Flight Manual then the main Flight Manual limits apply. Maintenance Manual remains unchanged.

This Supplement is only applicable to the envelope derivatives listed in Table 1 below.

TABLE 1

Balloon Type	Nominal Volume		Drawing Number
	cu.m.	cu.ft.	
Series Special - Penguin	1,982	70,000	SS-001-A-001
Series Special – Boot	2,970	105,000	SS-003-A-001
Series Special - Sphere	1,982	70,000	SS-002-A-001
Series Special - Cylinder	3,681	130,000	SS-005-A-001
Series Special - Cube	2,973	105,000	SS-004-A-001

2.0 OPERATIONAL LIMITATIONS

2.1 WIND SPEED

The maximum surface wind speed for take-off and landing of the Series Special Envelopes is defined in Table 2.

TABLE 2

Balloon Type	Nominal Volume		Maximum Take-off Wind Speed Kts
	cu.m.	cu.ft.	
Series Special - Penguin	1,982	70,000	12
Series Special - Boot	2,970	105,000	10
Series Special - Sphere	1,982	70,000	15
Series Special - Cylinder	3,681	130,000	10
Series Special – Cube	2,973	105,000	12

2.2 ASCENT / DESCENT SPEED

The maximum rate of climb and descent for the Series Special envelopes is defined in Table 3.

TABLE 3

Balloon Type	Nominal Volume		Maximum Rates	
	cu.m.	cu.ft.	Climb fpm	Descent fpm
Series Special - Penguin	1,982	70,000	800	800
Series Special – Boot	2,970	105,000	500	500
Series Special - Sphere	1,982	70,000	800	800
Series Special – Cylinder	3,681	130,000	500	500
Series Special – Cube	2,973	105,000	500	500

2.3 MAXIMUM WEIGHT

Maximum operational weights are defined in Table 4.

TABLE 4

Balloon Type	Nominal Volume		FAI Class	Maximum Weight		Envelope Weight	
	cu.m.	cu.ft.		kg	lbs	kg	lbs
Series Special - Penguin	1,982	70,000	AX7	700	1,540	109	239
Series Special - Boot	2,970	105,000	AX8	1,050	2,310	298	655
Series Special - Sphere	1,982	70,000	AX7	700	1,540	130	286
Series Special - Cylinder	3,681	130,000	AX9	1300	2866	300	661
Series Special – Cube	2,973	105,000	AX8	1,050	2310	300	661

2.4 PAYLOAD CALCULATION

Calculation of the payload remains the same as the Flight Manual and can be found in Section 4.8 of the Flight Manual. The conversion of the lift per unit volume figure, found from the load charts, into a gross lift figure is achieved by multiplying by the nominal volume given above in Table 4.

3.0 NORMAL PROCEDURES

3.1 IN-FLIGHT CONTROL

A parachute vent is provided for in-flight venting. This is operated by pulling on the candy stripe line to open. Operational guidance remains unchanged from the Flight Manual.

4.0 MAINTENANCE

4.1 MAINTENANCE CHECKS

No change.