

# 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   |

#### 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                              |

## 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         |

## 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 |

## 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.