TYPE-CERTIFICATE
DATA SHEET

NO. EASA.BA.500

for

LTL-TGB

Type Certificate Holder
LINDSTRAND TECHNOLOGIES Ltd.

Unit 11
Maesbury Road
Oswestry SY10 8GA
UNITED KINGDOM

For models: 197-T (PTB)
SECTION A:  MODEL A DESIGNATION ........................................................................ 4
A.I.    General ........................................................................................................ 4
A.II.   EASA Certification Basis ............................................................................ 4
A.III.  Technical Characteristics and Operational Limitations .............................. 5
A.V.    Notes ........................................................................................................... 6
Lindstrand Technologies Type LTL-TGB Aerostats. .................................................. 6
SECTION A: MODEL A DESIGNATION

A.I. General

1. Data Sheet No: EASA.BA.500 Issue Date: 30 October 2019
2. Type / Variant or Model
   (a) Type: LTL-TGB
   (b) Variant or Model: Refer to Section 2
3. Airworthiness Category: Normal
4. Type Certificate Holder: LINDSTRAND TECHNOLOGIES LTD.
   Unit 11
   Maesbury Road
   Oswestry SY10 8GA
   UNITED KINGDOM
5. Manufacturer: LINDSTRAND TECHNOLOGIES LTD.
   Unit 11
   Maesbury Road
   Oswestry SY10 8GA
   UNITED KINGDOM
6. EASA Certification date: 30 October 2019

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 10.04.2018
2. Airworthiness Requirements: EASA CS-31TGB Amendment 1 (1 July 2013),
3. Special Conditions: None
4. Reversion and Exemptions: None
5. Equivalent Safety Findings: None
A.III. **Technical Characteristics and Operational Limitations**

1. Type Design Drawing: Refer to Table 1 column headed “General Assembly Reference”

2. Description: Manned tethered gas balloon for passenger transport.

   2.1. Envelope
      Aerodynamic profiled fabric envelope. The envelope consists of multiple horizontal gores. Ballonet volume equates for 20% of the total volume. Refer to Table 1 column headed “Volume” for total volume.

   2.2. Gondola
      Of stainless steel construction consisting of PVC or Wicker side walls with a safety mesh covering all openings.

3. Equipment:

   3.1. Envelope
      1 Helium Valve
      1 Ballonet Valve including Pressure Transducer
      1 Ballonet Pressure Relief Valve
      2 Fin Fans
      1 Lightning Strike Pole
      1 Anemometer
      1 Helium Temperature Probe
      1 Ballonet Pressure Transducer & Display
      1 Ambient Temperature Probe & Display
      1 Set of Internal Light (Optional)

   3.2. Gondola
      1 Control Box including displays and functions of items described in section 3.1.
      1 Power system which may consists of battery and/or generator power.
      Navigation lights

4. Ground Facilities

   Lindstrand Technologies winch WI-401: Electric motor driven cable winch as the ascent/descent device. Auxiliary drive for recovery fitted to the winch drum. For cable lengths refer to Table 1 column headed “Cable Length”.

5. Minimum Occupants

   None (pilot is ground-based).

6. Maximum Occupants

   Refer to Table 1 column headed “Occupants”.

7. Maximum Mass:

   Refer to Table 1 column headed “Maximum Mass”.

8. Maximum Windspeed:

   15.4 m/sec (30 knots, 55 km/h) for flight operations,
   The aerostat is to be hangered if no flight operations are conducted.

9. Minimum Crew:

   Refer to product flight manual.

10. Life Limit Parts:

    Refer to product maintenance manual.

11. Lifting Gas:

    Helium.
A.IV. **Operating and Service Instructions**

1. Lindstrand Technologies Flight Manual and Supplements - Issue 1 or later approved EASA revision. See Section 2, Table 1, column headed “FM Ref”

2. Lindstrand Technologies Maintenance Manual and Supplements - Issue 1 or later approved EASA revision. See Section 2, Table 1, column headed “MM Ref”

A.V. **Notes**

Note 1 Repairs and replacement of the tether system require a re-evaluation of the compliance declaration in accordance with 31TGB.53

**Lindstrand Technologies Type LTL-TGB Aerostats.**

The definition of all variants (models) is listed in Table 1.

**Table 1 Definitions, Limitations and Information**

<table>
<thead>
<tr>
<th>LTL-TGB Model</th>
<th>General Assembly Reference</th>
<th>Volume (m³)</th>
<th>Cable Length (m)</th>
<th>Maximum Mass (kg)</th>
<th>Maximum Occupants</th>
<th>FM Ref:</th>
<th>MM Ref:</th>
</tr>
</thead>
<tbody>
<tr>
<td>197-T (PTB)</td>
<td>GA-032-A-001</td>
<td>5600</td>
<td>400</td>
<td>3327</td>
<td>0</td>
<td>197-TFM</td>
<td>197-T EGMM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>197-T WOMM</td>
</tr>
</tbody>
</table>

-END-