

**Civil Aviation Authority  
United Kingdom**



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## **TYPE-CERTIFICATE DATA SHEET**

**UK.TC.BA.00131**

for  
HiFlyer

Type Certificate Holder  
Lindstrand UK Ltd  
Unit 11, Mile Oak Industrial Estate  
Maesbury Road  
Oswestry SY10 8GA  
UNITED KINGDOM

UK.21J.1023

Model(s): 203T  
Issue: 1  
Date of issue: 27 October 2025

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**Section 1 203T****I. General****1. Type / Variant / Model**

203T

**2. Type Certificate Holder**

LINDSTRAND UK LTD.  
Unit 11, Mile Oak Industrial Estate  
Maesbury Road  
Oswestry  
SY10 8GA  
UNITED KINGDOM

**3. Manufacturer**

LINDSTRAND INDUSTRIES LTD.  
Unit 11, Mile Oak Industrial Estate  
Maesbury Road  
Oswestry  
SY10 8GA  
UNITED KINGDOM

**4. Airworthiness Category**

Normal

**5. Certification Date (by EASA)**

4 March 2005

**II. Certification Basis****1. Reference date for determining the applicable requirements**

09.09.2003

**2. Certification Basis**

CRI A-01 Issue 2 (closed, dated 14 February 2005)

**3. Airworthiness Requirements**

Draft CS 31TGB (final CG9 draft 27 February 2003)

**4. Elected to Comply Requirements**

None

**5. Special Conditions**

None

**6. Exemptions**

None

**7. Equivalent Safety Findings**

None

### III. Technical Characteristic and Operating Limitations

#### 1. Type Design Definition

Drawing list for tethered gas balloon type 203T, HF-001-A-001, Issue 4.0 or subsequent approved by CAA

For the ascent/descent device:

David Brown winch:

Drawing list WI-001-A-001, Issue 1.0 and subsequent new editions and changes to it approved by CAA

LTL winch:

Drawing list WI-002-A-001, Issue 2.0 and subsequent new editions and changes to it approved by CAA

HydroTechnics winch (see V.3):

General assembly drawing ACFR-LTL-HF-HYD.WI-001-K-001, Issue 1 and subsequent new editions and changes to it approved by CAA

#### 2. Description

Stationary, manned tethered gas balloon for passenger transport

##### 2.1. Envelope

Spherical coated fabric envelope of about 5,790 m<sup>3</sup> total volume consisting of 24 vertical gores, with load transfer by net and lines; 20% ballonnet in lower part of the envelope; automatically and manually controllable over-pressure valve.

##### 2.2. Gondola

Four-part gondola with octagonal gangway, stainless steel frames; side walls with wicker or PVC covers

Outer diameter: 520 cm

Inner diameter: 346 cm

Height: 210 cm

Inner height of gondola wall: 117 cm

#### 3. Equipment

1 Envelope pressure gauge

1 Helium temperature gauge

1 Load cell in the tether system

1 Wind speed anemometer

1 Outside air temperature gauge

1 Ballonet pressure gauge

1 Auto/manual helium valve switch

#### 4. Ground Facilities

Stationary electric motor-driven cable winch as the ascent/descent device, usable cable length 160 m

David Brown and LTL winch: With electric motor emergency back-up unit.

HydroTechnics winch: Diesel powered generator as emergency back-up unit for electric power to drive the hydraulic pumps

#### 5. Minimum Occupants

1

#### 6. Maximum Occupants

31

#### 7. Maximum Mass

2 109 kg

Permitted range of cable force measured by the load cell in the tether system (also known as 'free lift'):

Maximum : 36 228 N when gondola rests on the ground

Minimum : 8 829 N with gondola loaded and lifted

## 8. Life Limit Parts

Refer to product maintenance manual.

## 9. Lifting Gas

Helium.

# IV. Operating and Service Instructions

## 1. Operating Instructions

Flight Manual for the 203T tethered gas balloon with David Brown Winch, TAOM Issue 5 and subsequent CAA approved Supplements and changes (see V.4)

Flight Manual for the LTL winch: TAFM Issue 1.0, and subsequent CAA approved supplements and changes

Flight Manual for the HydroTechnics winch: TAOM Issue 5.2 (see V.4)

## 2. Service Instructions

Maintenance Manual for the 203T tethered gas balloon (not winches), TAOM MM Issue 1.9, and subsequent accepted supplements and changes

Maintenance Manual for the David Brown winch: DBSP WOMM Issue 6.0 and subsequent accepted supplements and changes

Maintenance Manual for the LTL winch: LTL WOMM Issue 1.0, and subsequent accepted supplements and changes

Maintenance Manual for the HydroTechnics winch: HYD.WOMM-001 Issue 1 and subsequent accepted supplements and changes

# V. Notes

## Note 1

Serial number applicability of TC/TCDS: Due to the HiFlyer having been produced in various forms since 1997 as a non-aviation product, there may be some retrospective 'catching-up' of some of these pre-existing machines as aircraft. If this takes place, it will be signified by their serial numbers being added to this TCDS (see Note 2.).

Unless a request is made to CAA by the Type Certificate holder to exclude specific serial numbers, it will be assumed that Hiflyers (including their winches) produced after the date of the initial issue of the Type Certificate are classified as Part 21 aircraft and fully covered by the type certificate exercise. If any doubts exists As to the certification status of any Hiflyer component (including the winch) the Type Certificate Holder should be contacted.

## Note 2

Serial numbers converted to aircraft post-build and in conformity with TCDS.BA.005: HF 010

## Note 3

The approval is limited to the HydroTechnics winch conforming to ACFR-LTL-HF-HYD.WI-001-K-001 used beneath the balloon serial number s/n HF 057

## Note 4

Flight Manual TAOM Issue 5.2 applies exclusively for operation with the HydroTechnics winch conforming to ACFR-LTL-HF-HYD.WI-001-K-001

**Section 2 Administration****I. Acronyms and Abbreviations**

<b>Acronym / Abbreviation</b>	<b>Definition</b>
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
CAA	Civil Aviation Authority
EASA	European Union Aviation Safety Authority

**II. Type Certificate Holder Record**

<b>TCH Record</b>	<b>Period</b>
Lindstrand UK Ltd Unit 11, Mile Oak Industrial Estate Maesbury Road Oswestry SY10 8GA UNITED KINGDOM	27 October 2025
Lindstrand Technologies Ltd Unit 11, Mile Oak Industrial Estate Maesbury Road Oswestry SY10 8GA UNITED KINGDOM	4 March 2005 – 27 October 2025

**III. Amendment Record**

<b>TCDS Issue No.</b>	<b>TCDS Issue Date</b>	<b>Changes</b>	<b>TC Issue and Date</b>
1	27 Oct 2025	Initial CAA issue, Lindstand UK Ltd new TCH.	Issue 1 27 Oct 2025

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