

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

B01CE
Revision 1
Sky Balloons Ltd.
65-24 77-24
90-24 105-24
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June 22, 1998

TYPE CERTIFICATE DATA SHEET No. B01CE

This Data Sheet, which is part of Type Certificate No. B01CE, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Sky Balloons Ltd.
 Redwither Tower
 Wrexham Industrial Estate
 Clwyd LL13 9UE
 Great Britain

I - Model 65-24 Hot Air Balloon, Approved February 21, 1997

Envelope Volume 65,000 cu.ft, drawing A4/EN/65/A.

Air Heater Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A.
 Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A.

Baskets Sky Balloons Baskets size 1.29m x 1.07m to drawings A0/BT/:
 1000/A, 1000/AA, 1100/A, 1500/A, 1500/AA.

Fuel Commercial LPG or Propane.

Maximum Weight 650Kg (1433 lbs), or the weight requiring maximum continuous
 envelope temperature of 120°C (248°F), whichever is the less. See
 Approved Flight Manual.

Allowable Envelope 1. Never exceed 127°C (261°F).
Temperature 2. Maximum continuous 120°C (248°F).

Minimum Crew One (1) Pilot.

Minimum Fuel Required Two standard cylinders must be present (see also NOTE 4)

Serial No's Eligible 001 onwards.

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II - Model 77-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 77,000 cu.ft, drawing A4/EN/77/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A. Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A.
<u>Baskets</u>	Sky Balloons Baskets size 1.29m x 1.07m to drawings A0/BT/: 1000/A, 1000/AA, 1100/A, 1500/A, 1500/AA. Or Baskets size 1.55m x 1.19m to drawings A0/BT/: 2000/A, 2000/AA, 2100/A, 2500/A, 2500/AA.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	750Kg (1653 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	004 onwards.

III - Model 90-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 90,000 cu.ft, drawing A4/EN/90/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A. Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A.
<u>Baskets</u>	Sky Balloons Baskets size 1.55m x 1.19m to drawings A0/BT/: 2000/A, 2000/AA, 2100/A, 2500/A, 2500/AA
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	900Kg (1984 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	005 onwards.

IV - Model 105-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 105,000 cu.ft, drawing A4/EN/105/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A. Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A.
<u>Baskets</u>	Sky Balloons Baskets size 1.55m x 1.19m to drawings A0/BT/: 2000/A, 2000/AA, 2100/A, 2500/A, 2500/AA Or Baskets size 1.80m x 1.29m to drawings A0/BT/: 3000/A, 3000/AA, 3100/A, 3200/A, 3500/A, 3500/AA.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1050Kg (2315 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	002 onwards.

V - Model 120-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 120,000 cu.ft, drawing A4/EN/120/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A. Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A.
<u>Baskets</u>	Sky Balloons Baskets size 1.80m x 1.29m to drawings A0/BT/: 3000/A, 3000/AA, 3100/A, 3200/A, 3500/A, 3500/AA.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1200Kg (2646 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	009 onwards.

VI - Model 140-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 140,000 cu.ft, drawing A4/EN/140/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A Sky Balloons BR1 Triple Burner, drawing A0/BR1/3000/A Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A Sky Balloons BR2 Triple Burner, drawing A0/BR2/3000/A
<u>Baskets</u>	Sky Balloons Baskets size 2.07m x 1.57m, drawings A0/BT/: 10000/A, 10500/A Or Baskets size 2.47m x 1.57m, drawings A0/BT/: 12000/A, 12100/A, 12150/A, 12500/A
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1330Kg (2932 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	006 onwards.

VII - Model 160-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 160,000 cu.ft, drawing A4/EN/160/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A Sky Balloons BR1 Triple Burner, drawing A0/BR1/3000/A Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A Sky Balloons BR2 Triple Burner, drawing A0/BR2/3000/A
<u>Baskets</u>	Sky Balloons Baskets size 2.07m x 1.57m, drawings A0/BT/: 10000/A, 10500/A Or Baskets size 2.47m x 1.57m, drawings A0/BT/: 12000/A, 12100/A, 12150/A, 12500/A
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1440Kg (3175 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	043 onwards.

VIII - Model 180-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 180,000 cu.ft, drawing A4/EN/180/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A Sky Balloons BR1 Triple Burner, drawing A0/BR1/3000/A Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A Sky Balloons BR2 Triple Burner, drawing A0/BR2/3000/A
<u>Baskets</u>	Sky Balloons Baskets size 2.07m x 1.57m, drawings A0/BT/: 10000/A, 10500/A Or Baskets size 2.47m x 1.57m, drawings A0/BT/: 12000/A, 12100/A, 12150/A, 12500/A. Or Baskets size 2.87m x 1.57m, drawings A0/BT/: 14000/A, 14100/A, 14150/A, 14500/A. Or Baskets size 3.07m x 1.57m, drawings A0/BT/: 16000/A, 16500/A.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1620Kg (3571 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	008 onwards.

IX - Model 200-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 200,000 cu.ft, drawing A4/EN/200/A.
<u>Air Heater</u>	Sky Balloons BR1 Double Burner, drawing A0/BR1/2000/A Sky Balloons BR1 Triple Burner, drawing A0/BR1/3000/A Sky Balloons BR2 Double Burner, drawing A0/BR2/2000/A Sky Balloons BR2 Triple Burner, drawing A0/BR2/3000/A Sky Balloons BR2 Quad Burner, drawing A0/BR2/4000/A
<u>Baskets</u>	Sky Balloons Baskets size 2.47m x 1.57m, drawings A0/BT/: 12000/A, 12100/A, 12150/A, 12500/A. Or Baskets size 2.87m x 1.57m, drawings A0/BT/: 14000/A, 14100/A, 14150/A, 14500/A. Or Baskets size 3.07m x 1.57m, drawings A0/BT/: 16000/A, 16500/A. Or Baskets size 3.27m x 1.57m, drawings A0/BT/: 18000/A, 18500/A.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1620Kg (3571 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.

<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	003 onwards.

X - Model 220-24 Hot Air Balloon, Approved February 21, 1997

<u>Envelope</u>	Volume 220,000 cu.ft, drawing A4/EN/220/A.
<u>Air Heater</u>	Sky Balloons BR1 Triple Burner, drawing A0/BR1/3000/A Sky Balloons BR2 Triple Burner, drawing A0/BR2/3000/A Sky Balloons BR2 Quad Burner, drawing A0/BR2/4000/A
<u>Baskets</u>	Sky Balloons Baskets size 2.47m x 1.57m, drawings A0/BT/: 12000/A, 12100/A, 12150/A, 12500/A. Or Baskets size 2.87m x 1.57m, drawings AO/BT/: 14000/A, 14100/A, 14150/A, 14500/A. Or Baskets size 3.07m x 1.57m, drawings A0/BT/: 16000/A, 16500/A. Or Baskets size 3.27m x 1.57m, drawings A0/BT/: 18000/A, 18500/A.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1980Kg (4365 lbs), or the weight requiring maximum continuous envelope temperature of 120°C (248°F), whichever is the less. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 127°C (261°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two standard cylinders must be present (see also NOTE 4)
<u>Serial No's Eligible</u>	032 onwards.

DATA PERTINENT TO ALL MODELS

<u>Import Requirements</u>	A U.S. Standard Airworthiness Certificate may be issued on the basis of a Certificate of Airworthiness for Export, signed by a representative of the U.K. Civil Aviation Authority, Airworthiness Division, containing the following statement "The balloon covered by this certificate has been examined, tested and found to conform to the type design approved under FAA Type Certificate B01CE and is in a condition for safe operation."
<u>Certification basis</u>	Far 21.29 and FAR 31, dated July 1, 1964, as amended by 31-1 through 31-5 inclusive. Application for Type Certificate dated July 17, 1996.

<u>Validation date</u>	Type certificate B01CE issued February 21, 1997 Type Certificate B01CE was issued pursuant to FAR 21.29, in validation of the U.K. Civil Aviation Authority's certification of compliance with the aforementioned certification basis.
<u>Equipment</u>	In addition to the basic equipment required by the certification basis, the following equipment is also required: 1) Two sources of ignition (striker, matches or equivalent). 2) Leather gloves or equivalent for the pilot. 3) The Approved Sky Balloons Ltd Flight Manual.
<u>Maintenance and Inspection</u>	Maintenance and inspection must be carried out in accordance with the Sky Balloons Ltd. Maintenance Manual, at the current issue. (Date of first issue September 1995).
<u>Service Information</u>	Sky Balloons Ltd. technical information (Service Bulletins), published in the English language for U.S. Type Designs, that carry a statement "Approved by the U.K. Civil Aviation Authority" (U.K. C.A.A.), may be interpreted as F.A.A. approved.

NOTES

- NOTE 1 Each hot air balloon must have an individual registration number. An individual envelope is eligible for a Standard Airworthiness Certificate when mated with any approved combination of basket and burner assembly. Change to an eligible combination must be endorsed by log book entry by the pilot in command, or by an F.A.A. certificated repairman.
- NOTE 2 For the purpose of maintenance and inspection, operation records (log books) must be maintained with each hot air balloon envelope. If burner, basket, instruments and/or tanks are interchanged, separate log books must be maintained for each component or group of components which are always used together. The Flight Manual must be presented to an FE certificated repair station during annual inspections, for verification of components being inspected.
- NOTE 3 Annual maintenance inspections should be carried out in accordance with the inspection schedule contained within the Sky Balloons Ltd. maintenance manual.
- NOTE 4 The approved types of fuel cylinders for all models are as follows:
Sky V30, vertical installation, 15 gallons capacity at 80% fill. Drawings A0/V30/****/A
Sky V40, vertical installation, 20 gallons capacity at 80% fill. Drawings A0/V40/****/A
(**** = No. denoting minor variants such as Rego/Tema etc.)

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