



<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up.

## **II - Model BB17XR, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB17XR, drawing 53-053660 Volume: 59 900 cu. ft., (1700 m <sup>3</sup> ). Gores: 16. Max. Diameter: 45 ft. (13.7 m). Total Height: 62 ft. (19.0 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1090 lbs. (495 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up, except 362.

## **III - Model BB20E, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB20E, drawing 53-053630 Volume: 71 200 cu. ft., (2000 m <sup>3</sup> ). Gores: 12. Max. Diameter: 53 ft. (16.2 m). Total Height: 52 ft. (15.9 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.

<u>Maximum Weight</u>	1389 lbs. (630 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

#### **IV - Model BB20ED, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB20ED, drawing 55330.00. Volume: 71,200 cu. ft., (2000 m <sup>3</sup> ). Gores: 12. Max. Diameter: 53 ft. (16.2 m). Total Height: 52 ft. (15.9 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1389 lbs. (630 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up.

#### **V - Model BB20, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB20, drawing 50-050020.
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Volume: 71 200 cu. ft., (2000 m<sup>3</sup>).  
 Gores: 12.  
 Max. Diameter: 51 ft. (15.4 m).  
 Total Height: 51 ft. (15.4 m).

<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1389 lbs. (630 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)            Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)            Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up.

#### **VI - Model BB20GP, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB20GP, drawing 52-052740. Volume: 71,200 cu. ft., (2000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 51 ft. (15.4 m). Total Height: 59 ft. (17.9 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)            Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)            Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.

<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up.

### **VII - Model BB20XR, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB20XR, drawing 52-054140 Volume: 71 200 cu. ft., (2000 m <sup>3</sup> ). Gores: 20 Max. Diameter: 47 ft. (14,4 m) Total Height: 67 ft. (20,3 m)
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15, K17.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

### **VIII - Model BB22E, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22E, drawing 53-053620 Volume: 78 200 cu. ft., (2200 m <sup>3</sup> ). Gores: 12. Max. Diameter: 55 ft. (16.7 m). Total Height: 54 ft. (16.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1498 lbs. (680 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)

	Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
	2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

### **IX - Model BB22ED, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22ED, drawing 55340.00 Volume: 78 200 cu. ft., (2200 m <sup>3</sup> ). Gores: 12. Max. Diameter: 55 ft. (16.7 m). Total Height: 54 ft. (16.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1498 lbs. (680 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

### **X - Model BB22, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22, drawing 52-053310. Volume: 78,200 cu. ft., (2200 m <sup>3</sup> ). Gores: 12. Max. Diameter: 57 ft. (17.5 m). Total Height: 53 ft. (16.2 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00

<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

#### **XI - Model BB22D, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22D, drawing 55200.00 Volume: 78 200 cu. ft., (2200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 54 ft. (16.3 m). Total Height: 54 ft. (16.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

#### **XII - Model BB22N, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22N, drawing 52-050034. Volume: 78,200 cu. ft., (2200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 53 ft. (16.2 m). Total Height: 53 ft. (16.2 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

### **XIII - Model BB22Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB22Z, drawing 52-053300. Volume: 78,200 cu. ft., (2200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 53 ft. (16.2 m). Total Height: 53 ft. (16.2 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.



<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

#### **XIV - Model BB22XR, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB22XR, drawing 55400.00 Volume: 78,200 cu. ft., (2200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 69 ft. (21.0 m). Total Height: 49 ft. (14.6 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K10, K11, K12, K12A, K13, K13S, K15.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1720 lbs. (780 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

#### **XV - Model BB26E, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB26E, drawing 53-053610 Volume: 92 500 cu. ft., (2600 m <sup>3</sup> ). Gores: 12. Max. Diameter: 58 ft. (17.6 m). Total Height: 57 ft. (17.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.

<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

### **XVI - Model BB26ED, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB26ED, drawing 55350.00 Volume: 92 500 cu. ft., (2600 m <sup>3</sup> ). Gores: 12. Max. Diameter: 58 ft. (17.6 m). Total Height: 57 ft. (17.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1609 lbs. (730 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

### **XVII - Model BB26, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB26, drawing 52-053325. Volume: 92,500 cu. ft., (2600 m <sup>3</sup> ). Gores: 12. Max. Diameter: 57 ft. (17.5 m).
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	Total Height: 57 ft. (17.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

### **XVIII - Model BB26D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB26D, drawing 55210.00 Volume: 92 500 cu. ft., (2600 m <sup>3</sup> ). Gores: 12. Max. Diameter: 56 ft. (17.2 m). Total Height: 57 ft. (17.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.

<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders
<u>Serial No's Eligible</u>	1 and up

**XIX - Model BB26N, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB26N drawing 51-050027. Volume: 92,500 cu. ft., (2600 m <sup>3</sup> ). Gores: 24. Max. Diameter: 56 ft. (17.2 m). Total Height: 57 ft. (17.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XX- Model BB26Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB26Z drawing 52-053305. Volume: 92,500 cu. ft., (2600 m <sup>3</sup> ). Gores: 24. Max. Diameter: 56 ft. (17.2 m). Total Height: 57 ft. (17.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)

	Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
	2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXI- Model BB26XR, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB26XR drawing 55410.00 Volume: 92,500 cu. ft., (2600 m <sup>3</sup> ). Gores: 24. Max. Diameter: 73 ft. (22.3 m). Total Height: 51 ft. (15.6 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXII- Model BB30ED, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB30ED drawing 55360.00 Volume: 106,800 cu. ft., (3000 m <sup>3</sup> ). Gores: 12. Max. Diameter: 60 ft. (18.4 m). Total Height: 62 ft. (18.8 m).
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<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1852 lbs. (840 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXIII- Model BB30D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	<p>BB30D drawing 55220.00.  Volume: 106,800 cu. ft., (3000 m<sup>3</sup>).  Gores: 24.  Max. Diameter: 60 ft. (18.4 m).  Total Height: 61 ft. (18.7 m).</p>
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2083 lbs. (945 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.

Serial No's Eligible 1 and up.

**XXIV- Model BB30N, Manned Free Balloon, Approved April 7, 2011**

Envelope BB30N drawing 51-050041.  
 Volume: 106,800 cu. ft., (3000 m<sup>3</sup>).  
 Gores: 24.  
 Max. Diameter: 60 ft. (18.4 m).  
 Total Height: 62 ft. (18.8 m).

Burner IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00

Baskets K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.

Fuel Commercial LPG or Propane.

Maximum Weight 2083 lbs. (945 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.

Allowable Envelope Temperature

1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
 Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
 Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

Minimum Crew One (1) Pilot.

Maximum Occupancy See Data Pertinent to All Models - Baskets.

Fuel Capacity At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.

Serial No's Eligible 1 and up.

**XXV - Model BB30Z, Manned Free Balloon, Approved April 7, 2011**

Envelope BB30Z drawing 52-052640.  
 Volume: 106,800 cu. ft., (3000 m<sup>3</sup>).  
 Gores: 24.  
 Max. Diameter: 59 ft. (18.0 m).  
 Total Height: 60 ft. (18.4 m).

Burner IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00

Baskets K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.

Fuel Commercial LPG or Propane.

Maximum Weight 2083 lbs. (945 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.

Allowable Envelope Temperature

1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
 Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXVI - Model BB30XR, Manned Free Balloon, Approved April 7, May 1, 2013**

<u>Envelope</u>	BB30XR drawing 55420.00. Volume: 106,800 cu. ft., (3000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 54 ft. (16.4 m). Total Height: 77 ft. (23.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K11, K12, K12A, K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2083 lbs. (945 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXVII - Model BB34ED, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB34ED, drawing 55370.00. Volume: 121,000 cu. ft., (3400 m <sup>3</sup> ). Gores: 12 Max. Diameter: 62 ft. (19,2 m) Total Height: 63 ft. (19.7 m)
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00



<u>Baskets</u>	K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2083 lbs. (945 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

### **XXVIII - Model BB34D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB34D, drawing 55230.00. Volume: 121,000 cu. ft., (3400 m <sup>3</sup> ). Gores: 24 Max. Diameter: 62 ft. (18.9 m) Total Height: 63 ft. (19.3 m)
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2291 lbs. (1040 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXIX - Model BB34Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB34Z, drawing 53-052880. Volume: 121,000 cu. ft., (3400 m <sup>3</sup> ). Gores: 24 Max. Diameter: 62 ft. (18.9 m) Total Height: 63 ft. (19.3 m)
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K13, K13S, K15, K16, K17, K18, K22.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2291 lbs. (1040 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXX- Model BB37D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB37D, drawing 55240.00 Volume: 131,700 cu. ft., (3700 m <sup>3</sup> ). Gores: 24. Max. Diameter: 64 ft. (19.4 m). Total Height: 65 ft. (19.9 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K13, K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2535 lbs. (1150 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon

fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXI - Model BB37N, Manned Free Balloon, Approved November 04, 2009**

<u>Envelope</u>	BB37N, drawing 51-050048. Volume: 131,700 cu. ft., (3700 m <sup>3</sup> ). Gores: 24. Max. Diameter: 65 ft. (19.7 m). Total Height: 66 ft. (20.0 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K13, K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2535 lbs. (1150 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXII- Model BB37Z, Manned Free Balloon, Approved November 04, 2009**

<u>Envelope</u>	BB37Z, drawing 52-053315. Volume: 131,700 cu. ft., (3700 m <sup>3</sup> ). Gores: 24. Max. Diameter: 65 ft. (19.7 m). Total Height: 66 ft. (20.0 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00
<u>Baskets</u>	K13, K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y.

<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2535 lbs. (1150 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXIII- Model BB40D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	<p>BB40D, drawing 55250.00.  Volume: 142,400 cu. ft., (4000 m<sup>3</sup>).  Gores: 24.  Max. Diameter: 65 ft. (19.9 m).  Total Height: 67 ft. (20.5 m).</p>
<u>Burner</u>	<p>IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00  IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00</p>
<u>Baskets</u>	K13, K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2885 lbs. (1310 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXIV - Model BB40Z, Manned Free Balloon, Approved November 04, 2009**

<u>Envelope</u>	BB40Z, drawing 53-053640. Volume: 142,400 cu. ft., (4000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 65 ft. (19.9 m). Total Height: 67 ft. (20.5 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00
<u>Baskets</u>	K13, K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2885 lbs. (1310 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXV- Model BB42D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB42D, drawing 55260.00 Volume: 151,300 cu. ft., (4200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 67 ft. (20.3 m). Total Height: 68 ft. (20.7 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00
<u>Baskets</u>	K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3109 lbs. (1410 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)

Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXVI - Model BB42Z, Manned Free Balloon, Approved November 04, 2009**

<u>Envelope</u>	BB42Z, drawing 52-052950. Volume: 151,300 cu. ft., (4200 m <sup>3</sup> ). Gores: 24. Max. Diameter: 67 ft. (20.3 m). Total Height: 68 ft. (20.7 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00
<u>Baskets</u>	K16, K17, K18, K22, K25P, K28, K32T, K32Y.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3109 lbs. (1410 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XXXVII - Model BB45D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB45D, drawing 55270.00. Volume: 160,200 cu. ft., (4500 m <sup>3</sup> ). Gores: 24. Max. Diameter: 68 ft. (20.7 m). Total Height: 69 ft. (21.1 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00

<u>Baskets</u>	K22, K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3351 lbs. (1520 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.

### **XXXVIII - Model BB45N, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	<p>BB45N, drawing 52-050455.  Volume: 160,200 cu. ft., (4500 m<sup>3</sup>).  Gores: 24.  Max. Diameter: 68 ft. (20.7 m).  Total Height: 69 ft. (21.1 m).</p>
<u>Burner</u>	<p>IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00  IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00  IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00</p>
<u>Baskets</u>	K22, K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3351 lbs. (1520 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.

Serial No's Eligible 1 and up.

**XXXIX - Model BB45Z, Manned Free Balloon, Approved April 7, 2011**

Envelope BB45Z, drawing 52-053320.  
 Volume: 160,200 cu. ft., (4500 m<sup>3</sup>).  
 Gores: 24.  
 Max. Diameter: 68 ft. (20.7 m).  
 Total Height: 69 ft. (21.1 m).

Burner IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00  
 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00  
 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00

Baskets K22, K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50TT.

Fuel Commercial LPG or Propane.

Maximum Weight 3351 lbs. (1520 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.

Allowable Envelope Temperature

1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
 Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
 Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

Minimum Crew One (1) Pilot.

Maximum Occupancy See Data Pertinent to All Models - Baskets.

Fuel Capacity At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner., See Data Pertinent to All Models - Fuel Cylinders.

Serial No's Eligible 1 and up.

**XL - Model BB51D, Manned Free Balloon, Approved May 1, 2013**

Envelope BB51D, drawing 55280.00.  
 Volume: 181,500 cu. ft., (5100 m<sup>3</sup>).  
 Gores: 24.  
 Max. Diameter: 71 ft. (21.6 m).  
 Total Height: 73 ft. (22.1 m).

Burner IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00  
 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00  
 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00

Baskets K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50TT

Fuel Commercial LPG or Propane.

Maximum Weight 3726 lbs. (1690 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.



<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLI - Model BB51Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB51Z, drawing 53-053430. Volume: 181,500 cu. ft., (5100 m <sup>3</sup> ). Gores: 24. Max. Diameter: 71 ft. (21.6 m). Total Height: 73 ft. (22.1 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3726 lbs. (1690 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLII - Model BB60D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB60D, drawing 55290.00. Volume: 213,600 cu. ft., (6000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 74 ft. (22.7 m). Total Height: 78 ft. (23.4 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	4277 lbs. (1940 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

### **XLIII - Model BB60N, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB60N, drawing 51-050643. Volume: 213,600 cu. ft., (6000 m <sup>3</sup> ). Gores: 32. Max. Diameter: 75 ft. (22.9 m). Total Height: 77 ft. (23.6 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	4277 lbs. (1940 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C)  
Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLIV - Model BB60Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB60Z, drawing 53-053000. Volume: 213,600 cu. ft., (5950 m <sup>3</sup> ). Gores: 24. Max. Diameter: 77 ft. (23.4 m). Total Height: 74 ft. (22.7 m).
<u>Burner</u>	IGNIS 2 units (double burner), drawing 84-053115.00, 84-053128.00 IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	4277 lbs. (1940 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)

<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least two cylinders for double burner, at least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLV - Model BB70D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB70D, drawing 55300.00. Volume: 249,200 cu. ft., (7000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 81 ft. (24.8 m).
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	Total Height: 81 ft. (24.6 m).
<u>Burner</u>	IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT, K60, K70, K80.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	5071 lbs. (2300 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLVI - Model BB70Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB70Z, drawing 53-052990. Volume: 249,200 cu. ft., (7000 m <sup>3</sup> ). Gores: 24. Max. Diameter: 81 ft. (24.8 m). Total Height: 81 ft. (24.6 m).
<u>Burner</u>	IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT, K60, K70, K80.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	5071 lbs. (2300 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.

<u>Fuel Capacity</u>	At least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up.

**XLVII - Model BB85D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB85D, drawing 55310.00 Volume: 302,600 cu. ft., (8500 m <sup>3</sup> ). Gores: 28. Max. Diameter: 87 ft. (26.6 m). Total Height: 87 ft. (26.5 m).
<u>Burner</u>	IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K40T, K40Y, K50, K50TT, K60, K70, K80.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	6217 lbs. (2820 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**XLVIII - Model BB85Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB85Z, drawing 52-052850. Volume: 302,600 cu. ft., (8500 m <sup>3</sup> ). Gores: 28. Max. Diameter: 87 ft. (26.6 m). Total Height: 87 ft. (26.5 m).
<u>Burner</u>	IGNIS 3 units (triple burner), drawing 84-053115.00, 84-053241.00 IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K40T, K40Y, K50, K50TT, K60, K70, K80.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	6217 lbs. (2820 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.

<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least three cylinders for triple burner, at least four cylinders for quad burner, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**XLIX - Model BB100D, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB100D, drawing 55320.00 Volume: 353,100 cu. ft., (10000 m <sup>3</sup> ). Gores: 28. Max. Diameter: 89 ft. (27 m). Total Height: 92 ft. (28.2 m).
<u>Burner</u>	IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K60, K70, K80, K85, K90, K100, K110.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	7055 lbs. (3200 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> <li>Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least four cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**L - Model BB100Z, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB100Z, drawing 50-054100. Volume: 353,100 cu. ft., (10000 m <sup>3</sup> ). Gores: 28.
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	Max. Diameter: 89 ft. (27 m). Total Height: 92 ft. (28.15 m).
<u>Burner</u>	IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K60, K70, K80, K85, K90, K100, K110.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	7055 lbs. (3200 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least four cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**LI - Model BB120P, Manned Free Balloon, Approved April 7, 2011**

<u>Envelope</u>	BB100Z, drawing 50-054120. Volume: 423,800 cu. ft., (12000 m <sup>3</sup> ). Gores: 28. Max. Diameter: 95 ft. (28.96m). Total Height: 102 ft. (31 m).
<u>Burner</u>	IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K60, K70, K80, K85, K90, K100, K110.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	8150 lbs. (3700 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.

<u>Fuel Capacity</u>	At least four cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**LII - Model BB142P, Manned Free Balloon, Approved May 1, 2013**

<u>Envelope</u>	BB100Z, drawing 50-054260.00 Volume: 500,000 cu. ft., (14200 m <sup>3</sup> ). Gores: 32. Max. Diameter: 99 ft. (30.3). Total Height: 110 ft. (33.5 m).
<u>Burner</u>	IGNIS 4 units (quad burner), drawing 84-056000.00, 84-056001.00
<u>Baskets</u>	K60, K70, K80, K85, K90, K100, K110
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	9912 lbs. (4500 kg) or the weight limited by ambient conditions according to Balloons Flight Manual, whichever is lesser.
<u>Allowable Envelope Temperature</u>	1. Never exceed: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C) 2. Max. continuous: Polyester, Polyurethane or Acrylic coated hot air balloon fabric: 248 °F (124 °C) Nylon, Polyurethane coated hot air balloon fabric: 230°F (110°C)
<u>Minimum Crew</u>	One (1) Pilot.
<u>Maximum Occupancy</u>	See Data Pertinent to All Models - Baskets.
<u>Fuel Capacity</u>	At least four cylinders, See Data Pertinent to All Models - Fuel Cylinders.
<u>Serial No's Eligible</u>	1 and up

**DATA PERTINENT TO ALL MODELS**

<u>Certification Basis</u>	The regulations (unless otherwise stated) are Title 14 of the Code of Federal Regulations (14 CFR) Part 31 dated July 1, 1964, as amended through Amendment 31-7 effective May, 24, 1996. Application for Type Certificate dated November 25, 2005.  Equivalent Safety Items:  Equivalent levels of safety finding made per the provisions of 14 CFR Part 21.21(b)(1) for:  ELOS ACE-07-13: 14 CFR §31.47(d) Amendment 31-7, Burners; Refer to FAA memorandum dated December 18, 2007, applicable to IGNIS 2 units (double burner) and IGNIS 3 units (triple burner) only.
<u>Import Requirements</u>	The FAA can issue a U.S. airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a



representative of the Civil Aviation Authority of the Czech Republic (CAA-CZ) on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to comply with U.S. airworthiness regulations 14 CFR Federal Aviation Regulations Part 31, U.S. Type Certificate No. B04CE and to be in a condition for safe operation.'

#### Validation Basis

Type certificate B04CE issued March 20, 2008.

The applicable airworthiness requirements for a U.S. certification under 14 CFR 21 section 21.29 identified above were established considering the airworthiness requirements applied by the responsible exporting Czech-Republic civil aviation authority under the Bilateral Aviation Agreement (BAA) authorized by the Agreement between the Government of the Czech-Republic and the Government of the United States of America, including the Operating Procedure and the interim working agreement between the Government of the United States of America and the European Aviation Safety Agency (EASA) per FAA Order 8110.52.

Type Certificate B04CE was issued pursuant to the certification by the CAA-CZ and EASA that the BB Balloon Models BB20GP, BB22, BB22N, BB22Z, BB26, BB26N, BB26Z, BB30N, BB30Z, BB34Z, BB37N, BB37Z, BB42Z, BB45N, BB45Z, BB51Z, BB60N, BB60Z, BB70Z complies with the above requirements.

EASA issued EASA Type Certificate No. BA.003, as described in EASA TCDS No. EASA.BA.003 Issue 6.

#### Equipment

In addition to the basic equipment required by the certification basis, the following equipment is also required:

- 1) Lighter or similar ignition device (striker, matches or equivalent).
- 2) Fire extinguisher.
- 3) The Approved BALÓNY KUBÍČEK spol. s r.o. US Flight Manual B.0105 (for balloons of serial numbers up to 639)
- 4) The Approved BALÓNY KUBÍČEK spol. s r.o. US Flight Manual B.2105 (for balloons of serial numbers 640 and higher).

#### Maintenance and Inspection

Maintenance and inspection must be carried out in accordance with the BALÓNY KUBÍČEK spol. s r.o. Flight Manual B.0105 dated Sep 04, 2007, Revision 0, or later issue, and BALÓNY KUBÍČEK spol. s r.o. Maintenance Manual B.0205 dated Jan 10, 2008, Revision 0, or later issue (for balloons of serial number up to 639) or BALÓNY KUBÍČEK spol.s r.o. Maintenance Manual B.2205 dated Jun 30, 2009, Revision 0, or later issue (for balloons of serial number 640 and up) .

#### Service Information

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before December 12, 2005 – by the Civil Aviation Authority of the Czech Republic (CAA-CZ).

- Service bulletins,
- Structural repair manuals,
- Vendor manuals,
- Balloon flight manuals, and
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Baskets

(See Note 4 for model applicability.)

**Baskets s/n 400 and up**

<b>Basket</b>	<b>Size</b>	<b>Drawing</b>	<b>Max. occupancy</b>
K10	33 in x 46 in x 43 in	61-050097	3
K11	38 in x 46 in x 43 in	61-054200	4
K12	46 in x 46 in x 43 in	61-050556	5
K12A	46 in x 46 in x 43 in	61-050586	5
K13	46 in x 49 in x 43 in	61-045300	4
K13S	39 in x 47 in x 43 in	62-054450	3
K15	46 in x 53 in x 43 in	61-050111	5
K16	46 in x 57 in x 43 in	61-050125	6
K17	46 in x 57 in x 41 to 45 in	61-054400	6
K18	46 in x 61 in x 43 in	61-050135	7
K22	49 in x 71 in x 43 in	62-052680	8
K25P	49 in x 83 in x 43 in	62-052650	8
K28	63 in x 87 in x 45 in	62-057100	8
K32T	49 in x 94 in x 43 in	62-053050	10
K32Y	63 in x 94 in x 43 in	62-053050	10
K32TT	63 in x 98 in x 43 in	62-054950	10
K40T	63 in x 106 in x 43 in	62-052090	12
K40Y	63 in x 106 in x 43 in	62-052090	12
K50	63 in x 118 in x 43 in	62-054500	14
K50TT	63 in x 118 in x 43 in	62-054900	14
K60	63 in x 150 in x 43 in	62-054600	18
K70	63 in x 173 in x 43 in	62-054800	22
K80	63 in x 189 in x 43 in	62-054850	26
K85	63 in x 205 in x 43 in	62-57150	26
K90	63 in x 205 in x 43 in	62-57250	26
K100	63 in x 240 in x 43 in	62-054890	30
K110	63 in x 260 in x 43 in	62-054980	34

**Different data for baskets s/n up to 399**

<b>Basket</b>	<b>Size</b>	<b>Drawing</b>	<b>Max. occupancy</b>
K10	33 in x 39 in x 43 in	61-050097	3
K13S	37 in x 50 in x 43 in	61-045300	3
K15	46 in x 49 in x 43 in	61-050111	5
K16	46 in x 55 in x 43 in	61-050125	6
K22	49 in x 70 in x 43 in	62-052680	8
K25P	49 in x 82 in x 43 in	62-052650	8
K32T	49 in x 95 in x 45 in	62-053050	10
K40Y	64 in x 98 in x 45 in	62-052090	12
K60	67 in x 138 in x 43 in	62-054600	18
K70	67 in x 157 in x 43 in	62-054800	22
K80	67 in x 177 in x 43 in	62-054850	26

Basket optional equipment

The following optional equipment can be fitted in the baskets:

- Door – for baskets K17, K22, K25P, K28, K32T, K32Y, K40T, K40Y, K50, K50TT, K60, K70, K80, K85, K90, K100, K110

- Passenger seat – for baskets K15, K16, K17, K18, K22, K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT, K60, K70, K80, K85, K90, K100, K110
- Inner removable partitions – for baskets K25P, K28, K32T, K32Y, K32TT, K40T, K40Y, K50, K50TT, K60, K70, K80, K85, K90, K100, K110 - not applicable if Y-shaped inner compartments are fitted

Fuel Cylinders

(The approved types of fuel cylinders for use on all models.)

Manufacturer	Type	Weight	
		Empty (lb)	Full (lb)
Schroeder Fire Balloons	VA50	33	80
	VA70	40	107
Cameron Balloons	Worthington (CB250)	31	75
	CB497	35	75
	CB599	44	90
	CB2088	48	110
	CB426	48	112
	CB959	55	135
	CB2385	24	75
	CB2387	31	90
	CB2380	29	93
	CB2383	33	114
	CB2900	46	96
	CB2901	51	117
	CB2902	53	133
CB2903	60	139	
Linstrand Balloons	V20	31	75
	V30	40	106
	V40	44	132
	T30	22	88
Thunder & Colt	V20	31	75
	V30	40	106
	V40	44	132

## NOTES:

NOTE 1

Each manned free balloon must have an individual registration number. An individual envelope is eligible for a Standard Airworthiness Certificate when mated with its 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 FAA certificated repairman.

NOTE 2

For the purpose of maintenance and inspection, operation records (log books) must be maintained with each manned free 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 and Maintenance Manual must be presented to an FAA 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 BALÓNY

KUBÍČEK spol. s r.o. Maintenance Manual B.0205. or BALÓNY  
KUBÍČEK spol. s r.o. Maintenance Manual B.2205

NOTE 4

The only approved configurations of envelope, basket, and burner are specifically identified within each model section.

-End-