

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

B02CE Revision 12		
ULTRAMAGIC, S.A.		
F-18	M-42	V-65
H-31	M-56	V-77
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May 27, 2016		

**TYPE CERTIFICATE DATA SHEET No. B02CE**

This Data Sheet, which is part of Type Certificate No. B02CE, 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                      ULTRAMAGIC, S.A.  
Aerodrom Igualada-Odena s/n  
08711 Odena  
Spain

I - Model F-18, Hot Air Balloon, Approved March 6, 1998

Envelope                                      Volume:                157,130 cu. ft. (4,450 m<sup>3</sup>)  
Gores:    24  
Max. Diameter:    91.87 ft. (28.0 m)  
Total Height:        77.76 ft. (23.7 m)

Air Heater                                      Double Burner ULTRAMAGIC MK-10, drawing 2012.

Baskets    Model C-6, size 1.80 m x 1.30 m x 1.0 m, drawing 3006.

Fuel     Commercial LPG or Propane.

Maximum Weight                            2,205 lbs. (1,000 kg) or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser.  
See Approved Flight Manual.

Allowable Envelope Temperature                            1. Never exceed 130°C (266°F).  
2. Maximum continuous 120°C (248°F).

Minimum Crew                                 One (1) Pilot.

Fuel Capacity                                 Two Ultramagic cylinders, Type M-20.

Fast Deflation System                        Equipped with a Fast Deflation System of 6.5 m diameter.

Serial No's Eligible                         F18/01 onwards.

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II - Model H-42, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 42,372 cu. ft. (1,200 m <sup>3</sup> ) Drawing: 1035 Gores: 12 Disposition: Horizontal Max. Diameter: 45.28 ft. (13.8 m) Total Height: 56.76 ft. (17.3 m)
<u>Air Heater</u>	Single Burner ULTRAMAGIC MK-2, drawing 2003 Single Burner ULTRAMAGIC MK-2 Super, drawing 2005 Single Burner ULTRAMAGIC MK-10, drawing 2011 Single Burner ULTRAMAGIC MK-21, drawing 2021. Single Burner ULTRAMAGIC BMK-008, drawing 2031.
<u>Baskets</u>	Model C-0, size 0.80 m x 0.70 m x 0.90 m, drawing 3000. Model C-2, size 1.00 m x 1.00 m x 1.03 m, drawing 3002. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	569 lbs. (258 kg) for Basket C-0; 917 lbs. (416 kg) for Basket C-2; 917 lbs. (416 kg) for Basket CT-01; 917 lbs. (416 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	42/07 onwards.

III - Model H-56 Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 56,143 cu. ft. (1,590 m <sup>3</sup> ), Drawing: 1007 Gores: 12 Disposition: Horizontal Max. Diameter: 50.95 ft. (15.5 m) Total Height: 62.33 ft. (19.0 m)
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<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single Burner ULTRAMAGIC BMK-008, drawing 2031. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-0, size 0.80 m x 0.70 m x 0.9 m, drawing 3000. Model C-2, size 1.00 m x 1.00 m x 1.03 m, drawing 3002. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	569 lbs. (258 kg) for Basket C-0; 1,211 lbs. (549 kg) for Basket C-2; 1,162 lbs. (527 kg ) for Basket CT-01; 1,211 lbs. (549 kg ) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	56/15 onwards.

IV - Model H-65, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 64,970 cu. ft. (1,840 m <sup>3</sup> ) Drawing: 1003 Gores: 12 Disposition: Horizontal Max. Diameter: 53.58 ft. (16.3 m) Total Height: 65.29 ft. (19.9 m)
<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.

<u>Baskets</u>	Model C-1, size 1.00 m x 1.20 m x 1.03 m, drawing 3001. Model C-2, size 1.00 m x 1.00 m x 1.03 m, drawing 3002. Model C-3, size 1.10 m x 1.3 m x 1.03 m, drawing 3003. Model C-10, size 1.45 m x 1.15 x 1.1 m, drawing 3010. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,407 lbs. (638 kg) for Basket C-1; 1,407 lbs. (638 kg) for Basket C-2; 1,407 lbs. (638 kg) for Basket C-3; 1,407 lbs. (638 kg) for Basket C10; 1,182 lbs. (536 kg) for Basket CT-01; 1,407 lbs. (638 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	65/78 onwards.

V - Model H-77, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 77,329 cu. ft. (2,190 m <sup>3</sup> ) Drawing: 1002 Gores: 12 Disposition: Horizontal Max. Diameter: 56.66 ft. (17.3 m) Total Height: 68.74 ft. (21.0 m)
<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-1, size 1.00 m x 1.20 m x 1.03 m, drawing 3001. Model C-2, size 1.00 m x 1.00 m x 1.03 m, drawing 3002. Model C-3, size 1.10 m x 1.30 m x 1.03 m, drawing 3003. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.

<u>Maximum Weight</u>	1,667 lbs. (756 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,667 lbs. (756 kg) for Basket C-3; 1,667 lbs. (756 kg) for Basket C-10; 1,190 lbs. (540 kg) for Basket CT-01, 1,667 lbs. (756 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	77/147 onwards.

#### VI - Model M-56C, Hot Air Balloon, Approved May 02, 2003

<u>Envelope</u>	Volume: 56,150 cu. ft. (1,590 m <sup>3</sup> ) Drawing: 1056 Gores: 24 Disposition: Horizontal Max. Diameter: 45.3 ft. (13.8 m) Total Height: 56.8 ft. (17.3 m)
<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single Burner ULTRAMAGIC BMK-008, drawing 2031. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-0, size 0.8 m x 0.7 m, drawing 3000. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	880 lbs. (399 kg) for Basket C-0; 1,214 lbs. (550 kg) for Basket C-2; 1,171 lbs. (531 kg) for Basket CT-01; 1,214 lbs. (550 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).

Fast Deflation System Optional. See NOTE 5.

Serial No's Eligible 56-15 onwards.

VII - Model M-65, Hot Air Balloon, Approved March 6, 1998

Envelope Volume: 64,970 cu. ft. (1,840 m<sup>3</sup>)  
 Drawing: 1020  
 Gores: 24  
 Disposition: Horizontal  
 Max. Diameter: 52.56 ft. (16.0 m)  
 Total Height: 65.10 ft. (19.8 m)

Air Heater 2002. Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002.  
 Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006.  
 Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012.  
 Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022.  
 Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.  
 Double Burner ULTRAMAGIC MK-32, drawing 2062.

Baskets Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001.  
 Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002.  
 Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003.  
 Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.  
 Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.  
 Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.  
 Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.

Fuel Commercial LPG or Propane.

Maximum Weight 1,407 lbs. (638 kg) for Basket C-1;  
 1,407 lbs. (638 kg) for Basket C-2;  
 1,407 lbs. (638 kg) for Basket C-3;  
 1,407 lbs. (638 kg) for Basket C-4;  
 1,407 lbs. (638 kg) for Basket C-10;  
 1,184 lbs. (537 kg) for Basket CT-01, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature 1. Never exceed 130°C (266°F).  
 2. Maximum continuous 120°C (248°F).

Minimum Crew One (1) Pilot.

Minimum Fuel Required Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).

Fast Deflation System Optional. See NOTE 5.

Serial No's Eligible 65/78 onwards.

VIII - Model M-65C, Hot Air Balloon, Approved March 6, 1998

Envelope Volume: 64,970 cu. ft. (1,840 m<sup>3</sup>)

Drawing: 1054  
 Gores: 24  
 Disposition: Horizontal  
 Max. Diameter: 48.23 ft. (14.7 m)  
 Total Height: 69.89 ft. (21.3 m)

Air Heater

Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002.  
 Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006.  
 Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012.  
 Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022.  
 Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.  
 Double Burner ULTRAMAGIC MK-32, drawing 2062.

Baskets

Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001.  
 Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002.  
 Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003.  
 Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.  
 Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.  
 Model, CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.

Fuel

Commercial LPG or Propane.

Maximum Weight

1,407 lbs. (638 kg) for Basket C-1;  
 1,407 lbs. (638 kg) for Basket C-2;  
 1,407 lbs. (638 kg) for Basket C-3;  
 1,407 lbs. (638 kg) for Basket C-4;  
 1,407 lbs. (638 kg) for Basket C-10;  
 1,193 lbs. (541 kg) for Basket CT-01;  
 1,407 lbs. (638 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature

1. Never exceed 130°C (266°F).
2. Maximum continuous 120°C (248°F).

Minimum Crew

One (1) Pilot.

Minimum Fuel Required

Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).

Fast Deflation System

Optional. See NOTE 5.

Serial No's Eligible

65/78 onwards.

IX- Model M-77, Hot Air Balloon, Approved March 6, 1998Envelope

Volume: 77,682 cu. ft. (2,200 m<sup>3</sup>)  
 Drawing: 1009  
 Gores: 24  
 Disposition: Horizontal  
 Max. Diameter: 55.55 ft. (16.9 m)  
 Total Height: 68.84 ft. (20.9 m)

<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,667 lbs. (756 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,667 lbs. (756 kg) for Basket C-3; 1,667 lbs. (756 kg) for Basket C-10; 1,188 lbs. (539 kg) for Basket CT-01; 1,667 lbs (756 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	77/147 onwards.

X - Model M-90. Hot Air Balloon. Approved March 6, 1998

<u>Envelope</u>	Volume: 90,041 cu. ft. (2,550 m <sup>3</sup> ) Drawing: 1040 Gores: 24 Disposition: Horizontal Max. Diameter: 57.09 ft. (17.4 m) Total Height: 70.87 ft. (21.6 m)
<u>Air Heater</u>	Double Burner ULTRAMAGIC MK-2, drawing 2002. Double Burner ULTRAMAGIC MK-2 Super, drawing 2006. Double Burner ULTRAMAGIC MK-10, drawing 2012. Double Burner ULTRAMAGIC MK-21, drawing 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Single Burner ULTRAMAGIC MK-21, drawing 2021. Double Burner ULTRAMAGIC MK-32, drawing 2062.

<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,936 lbs. (878 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,936 lbs. (878 kg) for Basket C-3; 1,936 lbs. (878 kg) for Basket C-4; 1,936 lbs. (878 kg) for Basket C-10, 1,702 lbs. (772 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	90/26 onwards.

XI - Model M-105, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 104,165 cu. ft. (2,950 m <sup>3</sup> ) Drawing: 1010 Gores: 24 Disposition: Horizontal Max. Diameter: 61.62 ft. (18.8 m) Total Height: 75.70 ft. (23.1 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Single, Double or Triple Burner ULTRAMAGIC MK-21, drawing 2021, 2022 or 2023. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.

<u>Maximum Weight</u>	2,276 lbs. (1,032 kg) for Basket C-1; 2,276 lbs.(1,032 kg) for Basket C-3; 2,276 lbs. (1,032 kg) for Basket C-4; 2,205 lbs. (1,000 kg) for Basket C-10; 1,728 lbs. (784 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	105/47 onwards.

## XII - Model M-130, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 129,941 cu. ft. (3,680 m <sup>3</sup> ) Drawing: 1021 Gores: 24 Disposition: Horizontal Max. Diameter: 66.23 ft. (20.2 m) Total Height: 80.56 ft. (24.2 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005. Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006. Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2,276 lbs. (1,032 kg) for Basket C-1; 3,010 lbs. (1,365 kg) for Basket C-3; 3,010 lbs. (1,365 kg) for Basket C-4; 3,010 lbs. (1,365 kg) for Basket C-5; 2,373 lbs. (1,076 kg) for Basket C-6; 2,840 lbs. (1,288 kg) for Basket C-7; 2,205 lbs. (1,000 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	130/14 onwards.

XIII - Model M-145, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 144,948 cu. ft. (4,105 m <sup>3</sup> ) Drawing: 1036 Gores: 24 Disposition: Horizontal Max. Diameter: 66.93 ft. (20.4 m) Total Height: 81.04 ft. (24.7 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.
<u>Baskets</u>	Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005. Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006. Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,010 lbs. (1,365 kg) for Basket C-3; 3,166 lbs. (1,436 kg) for Basket C-4; 3,166 lbs. (1,436 kg) for Basket C-5; 2,373 lbs. (1,076 kg) for Basket C-6; 2,840 lbs. (1,288 kg) for Basket C-7; 2,205 lbs. (1,000 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.

Serial No's Eligible

145/09 onwards.

XIV - Model M-160, Hot Air Balloon, Approved March 6, 1998Envelope

Volume: 160,661 cu. ft. (4,550 m<sup>3</sup>)  
 Drawing: 1011  
 Gores: 24  
 Disposition: Horizontal  
 Max. Diameter: 70.90 ft. (21.6 m)  
 Total Height: 86.23 ft. (26.3 m)

Air Heater

Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004.  
 Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007.  
 Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013.  
 Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023.  
 Double Burner ULTRAMAGIC BMK-008, drawing 2032.  
 Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.

Baskets

Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.  
 Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005.  
 Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006.  
 Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007.  
 Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.

Fuel

Commercial LPG or Propane.

Maximum Weight

3,460 lbs. (1,569 kg) for Basket C-4;  
 3,460 lbs. (1,569 kg) for Basket C-5;  
 2,373 lbs. (1,076 kg) for Basket C-6;  
 2,840 lbs. (1,288 kg) for Basket C-7;  
 2,205 lbs. (1,000 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature

1. Never exceed 130°C (266°F).
2. Maximum continuous 120°C (248°F).

Minimum Crew

One (1) Pilot.

Minimum Fuel Required

Two to six standard cylinders must be present (see NOTE 4).

Fast Deflation System

Optional. See NOTE 5.

Serial No's Eligible

160/19 onwards.

XV - Model N-180, Hot Air Balloon, Approved March 6, 1998Envelope

Volume: 180,081 cu. ft. (5,100 m<sup>3</sup>)  
 Drawing: 1031  
 Gores: 28  
 Disposition: N, Horizontal  
 Max. diameter: 73.74 ft. (22.5 m)  
 Envelope Height: 89.57 ft. (27.3 m)

<u>Air Heater</u>	Triple Burner ULTRAMAGIC MK-2, drawing 2004. Triple or Quadruple Burner ULTRAMAGIC MK-2 Super, drawing 2007 or 2008. Triple or Quadruple Burner ULTRAMAGIC MK-10, drawing 2013 or 2014. Double, Triple or Quadruple Burner ULTRAMAGIC MK-21, drawing 2022, 2023 or 2024. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double Burner ULTRAMAGIC BMK-050, drawing 2052. Double, Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2062, 2063 or 2064.
<u>Baskets</u>	Model C-5, size 1.40 m x 2.20 m x 1.1 m, drawing 3005. Model C-6, size 1.30 m x 1.80 m x 1.1 m, drawing 3006. Model C-7, size 2.00 m x 1.40 m x 1.1 m, drawing 3007. Model C-8, size 1.50 m x 2.60 m, drawing 3008 Model C-9, size 1.60 m x 3.00 m, drawing 3009.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,460 lbs. (1,569 kg) for Basket C-5; 2,373 lbs. (1,076 kg) for Basket C-6; 2,840 lbs. (1,288 kg) for Basket C-7; 3,868 lbs. (1,754 kg) for Basket C-8; 3,868 lbs. (1,754 kg) for Basket C-9, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to eight standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	180/15 onwards.

XVI - Model N-210 Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 211,860 cu. ft. (6,000m <sup>3</sup> ), Drawing 1032 Gores: 28 Disposition: N, Horizontal Max. diameter: 78.06 ft. (23.8 m) Envelope Height: 94,82 ft. (28,9 m)
<u>Air Heater</u>	Triple Burner ULTRAMAGIC MK-2, drawing 2004. Triple or Quadruple Burner ULTRAMAGIC MK-2 Super, drawings 2007 or 2008. Triple or Quadruple Burner ULTRAMAGIC MK-10, drawings 2013 or 2014. Double, Triple or Quadruple Burner ULTRAMAGIC MK-21, drawing 2022, 2023 or 2024. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double Burner ULTRAMAGIC BMK-050, drawing 2052. Double, Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2062, 2063 or 2064.

<u>Baskets</u>	Model C-5, size 1.40 m x 2.20 m x 1.1 m, drawing 3005. Model C-7, size 2.00 m x 1.40 m x 1.1 m, drawing 3007. Model C-8, size 1.50 m x 2.60 m, drawing 3008 Model C-9, size 1.60 m x 3.00 m, drawing 3009.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,460 lbs. (1,569 kg) for Basket C-5; 2,840 lbs. (1,288 kg) for Basket C-7; 3,956 lbs. (1,794 kg) for Basket C-8; 4,551 lbs. (2,064 kg) for Basket C-9, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to eight standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	210/07 onwards.

XVII - Model N-250, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 247,170 cu. ft. (7,000 m <sup>3</sup> ) Drawing: 1033 Gores: 28 Disposition: N, Horizontal Max. diameter: 81.82 ft. (24.9 m) Envelope Height: 99.41 ft. (30.3 m)
<u>Air Heater</u>	Quadruple Burner ULTRAMAGIC MK-2 Super, drawing 2008. Quadruple Burner ULTRAMAGIC MK-10, drawing 2014. Quadruple Burner ULTRAMAGIC MK-21, drawing 2024 Double or Triple Burner ULTRAMAGIC BMK-050, drawing 2052 or 2053. Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2063 or 2064.
<u>Baskets</u>	Model C-5, size 1.40 m x 2.20 m, drawing 3005. Model C-8, size 1.50 m x 2.60 m, drawing 3008. Model C-9, size 1.60 m x 3.00 m, drawing 3009.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,460 lbs. (1,569 kg) for Basket C-5; 3,956 lbs. (1,794 kg) for Basket C-8; 4,869 lbs. (2,208 kg) for Basket C-9, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.

<u>Minimum Fuel Required</u>	Two to eight standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	250/08 onwards.

XVIII - Model N-300, Hot Air Balloon, Approved May 3, 2007

<u>Envelope</u>	<p>Volume: 300,135 cu. ft. (8,500 m<sup>3</sup>)  Drawing: 1034  Gores: 28  Disposition: N, Horizontal  Max. diameter: 87.33 ft. (26.6 m)  Envelope Height: 106.20 ft. (32.4 m)</p>
<u>Air Heater</u>	<p>Triple Burner ULTRAMAGIC MK-21, drawing 2023.  Triple or Quadruple Burner ULTRAMAGIC MK-21, drawing 2023 or 2024.  Double or Triple Burner ULTRAMAGIC BMK-050, drawing 2052 or 2053.  Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2063 or 2064.</p>
<u>Baskets</u>	<p>Model C-5, size 1.40 m x 2.20 m, drawing 3005.  Model C-8, size 1.50 m x 2.60 m, drawing 3008.  Model C-9, size 1.60 m x 3.00 m, drawing 3009.  Model C-11, size 1.70 m x 3.50 m, drawing 3011  Model C-12, size 1.70 m x 4.50 m, drawing 3012</p>
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	<p>4,379 lbs. (1,986 kg) for Basket C-5;  4,908 lbs. (2,226 kg) for Basket C-8;  5,909 lbs. (2,680 kg) for Basket C-9;  6,447 lbs. (2,924 kg) for Basket C-11;  6,447 lbs. (2,924 kg) for Basket C-12, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.</p>
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>1. Never exceed 130°C (266°F).</li> <li>2. Maximum continuous 120°C (248°F).</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to eight standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	300/01 onwards.

XIX - Model N-355, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	<p>Volume: 353,100 cu. ft. (10,000 m<sup>3</sup>)  Drawing: 1053  Gores: 28  Disposition: N, Horizontal  Max. diameter: 90.23 ft. (27.5 m)  Envelope Height: 109.26 ft. (33,3 m)</p>
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<u>Air Heater</u>	<p>Quadruple Burner ULTRAMAGIC MK-2 Super, drawing 2008.          Quadruple Burner ULTRAMAGIC MK-10, drawing 2014.          Quadruple Burner ULTRAMAGIC MK-21, drawing 2024.          Triple or Quadruple Burner ULTRAMAGIC BMK-050, drawing 2053 or 2054          Quadruple Burner ULTRAMAGIC MK-32, drawing 2064.</p>
<u>Baskets</u>	<p>Model C-5, size 1.40 m x 2.20 m, drawing 3005.          Model C-8, size 1.50 m x 2.60 m, drawing 3008.          Model C-9, size 1.60 m x 3.00 m, drawing 3009.</p>
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	<p>3,460 lbs. (1,569 kg) for Basket C-5;          3,956 lbs. (1,794 kg) for Basket C-8;          4,869 lbs. (2,208 kg) for Basket C-9, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.</p>
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>1. Never exceed 130°C (266°F).</li> <li>2. Maximum continuous 120°C (248°F).</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to eight standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	355/02 onwards.

XX - Model S-90, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	<p>Volume: 90,041 cu. ft. (2,550 m<sup>3</sup>)          Drawing: 1013          Gores: 16          Disposition: Horizontal          Max. Diameter: 59.66 ft. (18.1 m)          Total Height: 71.87 ft. (21.9 m)</p>
<u>Air Heater</u>	<p>Double Burner ULTRAMAGIC MK-2, drawing 2002.          Double Burner ULTRAMAGIC MK-2 Super, drawing 2006.          Double Burner ULTRAMAGIC MK-10, drawing 2012.          Double Burner ULTRAMAGIC MK-21, drawing 2022.          Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.          Single Burner ULTRAMAGIC MK-21, drawing 2021.          Double Burner ULTRAMAGIC MK-32, drawing 2062.</p>
<u>Baskets</u>	<p>Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001.          Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002.          Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003.          Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.          Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.          Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.</p>
<u>Fuel</u>	Commercial LPG or Propane.

<u>Maximum Weight</u>	1,936 lbs. (878 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,936 lbs. (878 kg) for Basket C-3; 1,936 lbs. (878 kg) for Basket C-4; 1,936 lbs. (878 kg) for Basket C-10; 1,693 lbs. (768 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	90/26 onwards.

XXI - Model S-105 Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 104,165 cu. ft. (2,950 m <sup>3</sup> ) Drawing 1014 Gores: 24 Disposition: Horizontal Max. Diameter: 62.63 ft. (19.1 m) Total Height: 75.17 ft. (22.9 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or or 2023. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Single Burner ULTRAMAGIC MK-21, drawing 2021. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2,276 lbs. (1,032 kg) for Basket C-1; 2,276 lbs. (1,032 kg) for Basket C-3; 2,276 lbs. (1,032 kg) for Basket C-4; 2,205 lbs. (1,000 kg) for Basket C-10; 1,713 lbs. (777 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope</u>	1. Never exceed 130°C (266°F).

<u>Temperature</u>	2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	105/47 onwards.

XXII - Model S-130, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	<p>Volume: 129,941 cu. ft. (3,680 m<sup>3</sup>)  Drawing: 1015  Gores: 16  Disposition: Horizontal  Max. Diameter: 67.43 ft. (20.6 m)  Total Height: 80.49 ft. (24.5 m)</p>
<u>Air Heater</u>	<p>Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004.  Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007.  Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013.  Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023.  Double Burner ULTRAMAGIC BMK-008, drawing 2032.  Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.</p>
<u>Baskets</u>	<p>Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001.  Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003.  Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.  Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005.  Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006.  Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007.  Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.</p>
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	<p>2,276 lbs. (1,032 kg) for Basket C-1;  3,010 lbs. (1,365 kg) for Basket C-3;  3,010 lbs. (1,365 kg) for Basket C-4;  3,010 lbs. (1,365 kg) for Basket C-5;  2,373 lbs. (1,076 kg) for Basket C-6;  2,840 lbs. (1,288 kg) for Basket C-7;  2,205 lbs. (1,000 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.</p>
<u>Allowable Envelope Temperature</u>	<p>1. Never exceed 130°C (266°F).  2. Maximum continuous 120°C (248°F).</p>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.

Serial No's Eligible 130/14 onwards.

XXIII- Model S-160, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 160,661 cu. ft. (4,550 m <sup>3</sup> ) Drawing: 1016. Gores: 16 Disposition: Horizontal Max. Diameter: 72.50 ft. (22.1 m) Total Height: 85.98 ft. (26.2 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.
<u>Baskets</u>	Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005. Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006. Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,460 lbs. (1,569 kg) for Basket C-4; 3,460 lbs. (1,569 kg) for Basket C-5; 2,373 lbs. (1,076 kg) for Basket C-6; 2,840 lbs. (1,288 kg) for Basket C-7; 2,205 lbs. (1,000 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	160/19 onwards.

XXIV - Model T-150 Hot Air Balloon, Approved November 28, 2003

<u>Envelope</u>	Volume: 149,910 cu. ft. (4,245m <sup>3</sup> ) Drawing 1059 Gores: 20 Disposition: Horizontal Max. Diameter: 68.6 ft. (20.9 m) Envelope Height: 82.0 ft. (25.0 m)
<u>Air Heater</u>	Double/Triple Burner ULTRAMAGIC MK-10, drawings 2012, 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawings 2022, 2223. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.
<u>Baskets</u>	Model C-3, size 1.10 m x 1.30 m, drawing 3003. Model C-4, size 1.60 m x 1.20 m, drawing 3004 Model C-5, size 1.40 m x 2.20 m, drawing 3005. Model C-6, size 1.80 m x 1.30 m, drawing 3006. Model C-7, size 2.00 m x 1.40 m, drawing 3007. Model C-10, size 1.45 m x 1.15 m, drawing 3010.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,230 lbs. (1,465 kg) for Basket C-3; 3,230 lbs. (1,465 kg) for Basket C-4; 3,230 lbs. (1,465 kg) for Basket C-5; 2,987 lbs. (1,355 kg) for Basket C-6; 3,230 lbs. (1,465 kg) for Basket C-7; 2,669 lbs. (1,256 kg) for Basket C-10; or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	150/01 onwards.

XXV - Model T-180 Hot Air Balloon, Approved February 14, 2002

<u>Envelope</u>	Volume: 180,104 cu. ft. (5,100m <sup>3</sup> ) Drawing 1045 Gores: 20 Disposition: Horizontal Max. diameter: 72.8 ft. (22.2 m) Envelope Height: 89.6 ft. (27.3 m)
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<u>Air Heater</u>	Double and Triple Burner ULTRAMAGIC MK-2, drawing 2002/2004. Double, Triple or Quad Burner ULTRAMAGIC MK-2 Super, drawings 2006, 2007 or 2008. Double, Triple or Quad Burner ULTRAMAGIC MK-10, drawings 2012, 2013 or 2014. Double, Triple or Quad Burner ULTRAMAGIC MK-21, drawings 2022, 2023 or 2024. Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double Burner ULTRAMAGIC BMK-050, drawing 2052. Double, Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2062, 2063 or 2064.
<u>Baskets</u>	Model C-5, size 1.40 m x 2.20 m, drawing 3005. Model C-6, size 1.30 m x 1.80 m, drawing 3006. Model C-7, size 2.00 m x 1.40 m, drawing 3007. Model C-8, size 1.50 m x 2.60 m, drawing 3008. Model C-9, size 1.60 m x 3.00 m, drawing 3009.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	3,847 lbs. (1,745 kg) for Basket C-5; 3,552 lbs. (1,611 kg) for Basket C-6; 3,847 lbs. (1,745 kg) for Basket C-7; 3,847 lbs. (1,745 kg) for Basket C-8; 3,847 lbs. (1,745 kg) for Basket C-9; or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	180/29 onwards.

XXVI - Model T-210 Hot Air Balloon, Approved October 15, 2002

<u>Envelope</u>	Volume: 211,887 cu. ft. (6,000 m <sup>3</sup> ) Drawing 1046 Gores: 20 Disposition: N, Horizontal Max. diameter: 79.72 ft. (24.3 m) Envelope Height: 93.83 ft. (28.6 m)
<u>Air Heater</u>	Triple Burner or Quad Burner ULTRAMAGIC MK-2, drawings 2004 and 2008. Triple or Quad Burner ULTRAMAGIC MK-2 Super, drawings 2007 or 2008. Double, Triple or Quad Burner ULTRAMAGIC MK-10, drawings 2012, 2013 or 2014. Double Burner ULTRAMAGIC MK-21, drawing 2022 Double Burner ULTRAMAGIC BMK-008, drawing 2032. Double Burner ULTRAMAGIC BMK-050, drawing 2052.

Double, Triple or Quadruple Burner ULTRAMAGIC MK-32, drawing 2062, 2063 or 2064.

Baskets

Model C-5, size 1.40 m x 2.20 m x 1.1 m, drawing 3005.  
 Model C-7, size 2.00 m x 1.40 m x 1.1 m, drawing 3007.  
 Model C-8, size 1.50 m x 2.60 m, drawing 3008  
 Model C-9, size 1.60 m x 3.00 m, drawing 3009.  
 Model C-11, size 1.7 m x 3.5 m, drawing 3011.

Fuel

Commercial LPG or Propane.

Maximum Weight

4,255 lbs. (1,930 kg) for Basket C-5;  
 4,563 lbs. (2,070 kg) for Basket C-7;  
 4,563 lbs. (2,070 kg) for Basket C-8;  
 4,563 lbs. (2,070 kg) for Basket C-9;  
 4,563 lbs. (2,070 kg) for Basket C-11,  
 or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature

1. Never exceed 130°C (266°F).
2. Maximum continuous 120°C (248°F).

Minimum Crew

One (1) Pilot.

Minimum Fuel Required

Two to four standard cylinders must be present (see NOTE 4).

Fast Deflation System

Optional. See NOTE 5.

Serial No's Eligible

210/20 onwards.

XXVII - Model V-56, Hot Air Balloon, Approved March 6, 1998Envelope

Volume: 58,262 cu. ft. (1,650 m<sup>3</sup>)  
 Drawing: 1008  
 Gores: 24  
 Disposition: Vertical  
 Max. Diameter: 49.94 ft. (15.2 m)  
 Total Height: 62.40 ft. (19.0 m)

Air Heater

Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002.  
 Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006.  
 Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012.  
 Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022.  
 Single Burner ULTRAMAGIC BMK-008, drawing 2031.  
 Double Burner ULTRAMAGIC MK-32, drawing 2062.

Baskets

Model C-0, size 0.8 m x 0.7 m x 0.9 m, drawing 3000.  
 Model C-2, size 1.00 m x 1.00 m x 1.03 m, drawing 3002.  
 Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.  
 Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.

Fuel

Commercial LPG or Propane.

Maximum Weight

569 lbs. (258 kg) for Basket C-0;  
 1,211 lbs. (549 kg) for Basket C-2;

1,168 lbs. (530 kg) for Basket CT-01;  
1,211 lbs. (549 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature

1. Never exceed 130°C (266°F).
2. Maximum continuous 120°C (248°F).

Minimum Crew

One (1) Pilot.

Minimum Fuel Required

Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).

Fast Deflation System

Optional. See NOTE 5.

Serial No's Eligible

56/15 onwards.

XXVIII - Model V-65, Hot Air Balloon, Approved March 6, 1998

Envelope

Volume: 64,970 cu. ft. (1,840 m<sup>3</sup>)  
Drawing: 1004  
Gores: 24  
Disposition: Vertical  
Max. Diameter: 52.53 ft. (16.0 m)  
Total Height: 65.39 ft. (19.9 m)

Air Heater

Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002.  
Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006.  
Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012.  
Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022.  
Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.  
Double Burner ULTRAMAGIC MK-32, drawing 2062.

Baskets

Model C-1, size 1.0 m x 1.2 m x 1.03 m, drawing 3001.  
Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002.  
Model C-3, size 1.1 m x 1.3 m x 1.03 m, drawing 3003.  
Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.  
Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.  
Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.

Fuel

Commercial LPG or Propane.

Maximum Weight

1,407 lbs. (638 kg) for Basket C-1;  
1,407 lbs. (638 kg) for Basket C-2;  
1,407 lbs. (638 kg) for Basket C-3;  
1,407 lbs. (638 kg) for Basket C-10;  
1,182 lbs. (536 kg) for Basket CT-01;  
1,407 lbs. (638 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

Allowable Envelope Temperature

1. Never exceed 130°C (266°F).
2. Maximum continuous 120°C (248°F).

Minimum Crew

One (1) Pilot.

<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	65/78 onwards.

XXIX - Model V-77, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	<p>Volume: 77,329 cu. ft. (2,190 m<sup>3</sup>).</p> <p>Gores: 24 or 32</p> <p>Disposition: Vertical Vertical</p> <p>Max. Diameter: 55.71 ft. (17.0 m) 54.60 ft. (16.6 m)</p> <p>Total Height: 68.65 ft. (20.9 m) 68.87 ft. (21.0 m)</p> <p>Drawing: 1001 1017</p>
<u>Air Heater</u>	<p>Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002.</p> <p>Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006.</p> <p>Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012.</p> <p>Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022.</p> <p>Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.</p> <p>Double Burner ULTRAMAGIC MK-32, drawing 2062.</p>
<u>Baskets</u>	<p>Model C-1, size 1.0 m x 1.2 m x 1.03 m, drawing 3001.</p> <p>Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002.</p> <p>Model C-3, size 1.1 m x 1.3 m x 1.03 m, drawing 3003.</p> <p>Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.</p> <p>Model CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.</p> <p>Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.</p>
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	<p>1,667 lbs. (756 kg) for Basket C-1;</p> <p>1,667 lbs. (756 kg) for Basket C-2;</p> <p>1,667 lbs. (756 kg) for Basket C-3;</p> <p>1,667 lbs. (756 kg) for Basket C-10;</p> <p>1190 lbs. (540 kg) for Basket CT-10;</p> <p>1,211 lbs. (549 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.</p>
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>Never exceed 130°C (266°F).</li> <li>Maximum continuous 120°C (248°F).</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	77/147 onwards.

XXX - Model V-90 Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 90,041 cu. ft. (2,550 m <sup>3</sup> ) Drawing: 1018 Gores: 24 Disposition: Vertical Max. Diameter: 58.61 ft. (17.9 m) Total Height: 71.93 ft. (21.9 m)
<u>Air Heater</u>	Double Burner ULTRAMAGIC MK-2, drawing 2002. Double Burner ULTRAMAGIC MK-2 Super, drawing 2006. Double Burner ULTRAMAGIC MK-10, drawing 2012. Double Burner ULTRAMAGIC MK-21, drawing 2022 Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,936 lbs. (878 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,936 lbs. (878 kg) for Basket C-3; 1,936 lbs. (878 kg) for Basket C-4; 1,697 lbs. (770 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to four standard cylinders must be present (see NOTE 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	90/26 onwards.

XXXI - Model V-105, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	Volume: 104,165 cu. ft. (2,950 m <sup>3</sup> ) Drawing: 1019 Gores: 24 Disposition: Vertical Max. Diameter: 61.53 ft. (18.8 m) Total Height: 75.23 ft. (22.9 m)
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<u>Air Heater</u>	<p>Double or Triple burner ULTRAMAGIC MK-2, drawing 2002 or 2004.</p> <p>Double or Triple burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007.</p> <p>Double or Triple burner ULTRAMAGIC MK-10, drawing 2012 or 2013.</p> <p>Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023.</p> <p>Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.</p> <p>Double Burner ULTRAMAGIC MK-32, drawing 2062.</p>
<u>Baskets</u>	<p>Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001.</p> <p>Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003.</p> <p>Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004.</p> <p>Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.</p>
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	<p>2,276 lbs. (1,032 kg) for Basket C-1;</p> <p>2,276 lbs. (1,032 kg) for Basket C-3;</p> <p>2,276 lbs. (1,032 kg) for Basket C-4,</p> <p>1,724 lbs. (782 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.</p>
<u>Allowable Envelope Temperature</u>	<ol style="list-style-type: none"> <li>1. Never exceed 130°C (266°F).</li> <li>2. Maximum continuous 120°C (248°F).</li> </ol>
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4 and NOTE 12) .
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	105/47 onwards.

XXXII - Model Z-90, Hot Air Balloon, Approved March 6, 1998

<u>Envelope</u>	<p>Volume: 90,041 cu. ft. (2,550 m<sup>3</sup>).</p> <p>Drawing: 1025</p> <p>Gores: 16</p> <p>Max. Diameter: 59.71 ft. (18.2 m)</p> <p>Total Height: 74.48 ft. (22.7 m)</p>
<u>Air Heater</u>	<p>Double Burner ULTRAMAGIC MK-2, drawing 2002.</p> <p>Double Burner ULTRAMAGIC MK-2 Super, drawing 2006.</p> <p>Double Burner ULTRAMAGIC MK-10, drawing 2012.</p> <p>Double Burner ULTRAMAGIC MK-21, drawing 2022.</p> <p>Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032.</p> <p>Single Burner ULTRAMAGIC MK-21, drawing 2021.</p> <p>Double Burner ULTRAMAGIC MK-32, drawing 2062.</p>

<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,971 lbs. (894 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,971 lbs. (894 kg) for Basket C-3; 1,971 lbs. (894 kg) for Basket C-4; 1,971 lbs. (894 kg) for Basket C-10; 1,693 lbs. (768 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Fuel Capacity</u>	Two to four standard cylinders must be present (see Note 4 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	90/26 onwards.

XXXIII - Model H-31, Hot Air Balloon, Approved August 1, 2008

<u>Envelope</u>	Volume: 31,788 cu. ft. (900 m <sup>3</sup> ) Drawing: 1012 Gores: 12 Disposition: Horizontal Max. Diameter: 41.0 ft. (12.5 m) Total Height: 53.1 ft. (16.2 m)
<u>Air Heater</u>	Single Burner ULTRAMAGIC MK-2, drawing 2003. Single Burner ULTRAMAGIC MK-10, drawing 2011. Single Burner ULTRAMAGIC MK-21, drawing 2021. Single Burner ULTRAMAGIC BMK-008, drawing 2031.
<u>Baskets</u>	Model C-0, size 0.7 m x 0.8 m x 0.90 m, drawing 3000. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model, CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	677 lbs. (307 kg) for Basket C-0; 677 lbs. (307 kg) for Basket C-2; 677 lbs. (307 kg) for Basket CT-01, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.

<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	1 standard cylinder must be present (see NOTE 4, NOTE 10 and NOTE 11).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	31/01 onwards.

XXXIV - Model M-42, Hot Air Balloon, Approved August 1, 2008

<u>Envelope</u>	Volume: 42,384 cu. ft. (1,200 m <sup>3</sup> ) Drawing: 1038/010 Gores: 24 Disposition: Horizontal Max. Diameter: 44.6 ft. (13.6 m) Total Height: 57.4 ft. (17.5 m)
<u>Air Heater</u>	Single Burner ULTRAMAGIC MK-10, drawing 2011 Single Burner ULTRAMAGIC MK-21, drawing 2021 Single Burner ULTRAMAGIC BMK-008, drawing 2031
<u>Baskets</u>	Model C-0, size 0.7 m x 0.8 m x 0.90 m, drawing 3000 Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002 Model, CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	842 lbs. (382 kg) for Basket C-0; 913 lbs. (414 kg) for Basket C-2; 913 lbs (414 kg) for Basket CT-01; 913 lbs (414 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°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 NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	42/08 onwards.

XXXV - Model M-56, Hot Air Balloon, Approved August 1, 2008

<u>Envelope</u>	Volume: 56,159 cu. ft. (1,590 m <sup>3</sup> ) Drawing: 1034 Gores: 24 Disposition: Horizontal Max. Diameter: 48.0 ft. (14.9 m)
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Total Height: 61.7 ft. (18.8 m)

<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single Burner ULTRAMAGIC BMK-008, drawing 2031. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model C-0, size 0.8 m x 0.7 m x 0.90 m, drawing 3000. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model, CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	880 lbs. (399 kg) for Basket C-0; 1,213 lbs. (550 kg) for Basket C-2; 1,162 lbs (527 kg) for CT-01 Basket; 1,212 lbs (550 kg) for CT-02 Basket, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two or more standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	56-14 onwards.

XXXVI- Model M-77C, Hot Air Balloon, Approved August 1, 2008

<u>Envelope</u>	Volume: 77,704 cu. ft. (2,200 m <sup>3</sup> ) Drawing: 1057 Gores: 24 Disposition: Horizontal Max. Diameter: 50.9 ft. (15.5 m) Total Height: 78.7 ft. (24.0 m)
<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-2, drawing 2003 or 2002. Single or Double Burner ULTRAMAGIC MK-2 Super, drawing 2005 or 2006. Single or Double Burner ULTRAMAGIC MK-10, drawing 2011 or 2012. Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032 Double Burner ULTRAMAGIC MK-32, drawing 2062.

<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010. Model, CT-01, size 0.80 m x 1.00 m x 1.10 m, drawing 3200. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,667 lbs. (756 kg) for Basket C-1; 1,667 lbs. (756 kg) for Basket C-2; 1,667 lbs. (756 kg) for Basket C-3; 1,667 lbs. (756 kg) for Basket C-10; 1,202 lbs. (545 kg) for Basket CT-01; 1,667 lbs. (756 kg) for Basket CT-02, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two or more standard cylinders must be present (see NOTE 4, NOTE 10, NOTE 11 and NOTE 12).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	77/190 onwards.

XXXVII - Model M-120. Hot Air Balloon. Approved August 1, 2008

<u>Envelope</u>	Volume: 120,088 cu. ft. (3,400 m <sup>3</sup> ) Drawing: 1055 Gores: 24 Disposition: Horizontal Max. Diameter: 63.0 ft. (19.2 m) Total Height: 76.8 ft. (23.4 m)
<u>Air Heater</u>	Double or Triple Burner ULTRAMAGIC MK-2, drawing 2002 or 2004. Double or Triple Burner ULTRAMAGIC MK-2 Super, drawing 2006 or 2007. Double or Triple Burner ULTRAMAGIC MK-10, drawing 2012 or 2013. Double or Triple Burner ULTRAMAGIC MK-21, drawing 2022 or 2023. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032 Double or Triple Burner ULTRAMAGIC MK-32, drawing 2062 or 2063.
<u>Baskets</u>	Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-3, size 1.3 m x 1.1 m x 1.03 m, drawing 3003. Model C-4, size 1.6 m x 1.2 m x 1.03 m, drawing 3004. Model C-5, size 2.2 m x 1.4 m x 1.1 m, drawing 3005. Model C-6, size 1.8 m x 1.3 m x 1.1 m, drawing 3006.

Model C-7, size 2.0 m x 1.4 m x 1.1 m, drawing 3007.  
 Model C-10, size 1.45 m x 1.15 m x 1.1 m, drawing 3010.

<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	2,589 lbs. (1,173 kg) for Basket C-1; 2,589 lbs. (1,173 kg) for Basket C-3; 2,589 lbs. (1,173 kg) for Basket C-4; 2,589 lbs. (1,173 kg) for Basket C-5; 2,589 lbs. (1,173 kg) for Basket C-6; 2,589 lbs. (1,173 kg) for Basket C-7; 2,589 lbs. (1,173 kg) for Basket C-10, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two to six standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	120/01 onwards.

XXXVIII - Model N-425, Hot Air Balloon, Approved August 1, 2008

<u>Envelope</u>	Volume: 423,840 cu. ft. (12,000 m <sup>3</sup> ) Drawing: 1058 Gores: 28 Disposition: N, Horizontal Max. diameter: 96.8 ft. (29.5 m) Envelope Height: 116.5 ft. (35.5 m)
<u>Air Heater</u>	Quadruple Burner ULTRAMAGIC MK-2, drawing 2005. Quadruple Burner ULTRAMAGIC MK-2 Super, drawing 2008. Quadruple Burner ULTRAMAGIC MK-10, drawing 2014. Quadruple Burner ULTRAMAGIC MK-21, drawing 2024. Triple or Quad Burner ULTRAMAGIC BMK-050, drawing 2053 or 2054. Quadruple Burner ULTRAMAGIC MK-32, drawing 2064.
<u>Baskets</u>	Model C-5, size 1.40 m x 2.20 m, drawing 3005. Model C-8, size 1.50 m x 2.60 m, drawing 3008. Model C-9, size 1.60 m x 3.00 m, drawing 3009. Model C-11, size 1.70 m x 3.5 m, drawing 3011. Model C-12, size 1.70 m x 4.5 m, drawing 3012.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	4,431 lbs. (2,010 kg) for Basket C-5; 4,960 lbs. (2,250 kg) for Basket C-8; 6,204 lbs. (2,814 kg) for Basket C-9; 7,346 lbs. (3,332 kg) for Basket C-11; 8,184 lbs. (3,712 kg) for Basket C-12, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope</u>	1. Never exceed 130°C (266°F).

<u>Temperature</u>	2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	4 or more standard cylinders must be present (see NOTE 4).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	425/01 onwards.

XXXIX- Model S-50, Hot Air Balloon, Approved December 08, 2010

<u>Envelope</u>	Volume: 50,000 cu. ft. (1415 m <sup>3</sup> ) Drawing: 1062. Gores: 16 Disposition: Horizontal Max. Diameter: 48 ft. (14.7 m) Total Height: 60 ft. (18.3 m)
<u>Air Heater</u>	<u>Single</u> Burner ULTRAMAGIC MK-21, drawing 2021. Single Burner ULTRAMAGIC BMK-008, drawing 2031
<u>Baskets</u>	Model CT-01, size 0.8 m x 1.0m x 1.10 m, drawing 3200. Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-0, size 0.7m x 0.8m x 0.90 m, drawing 3000. Model CT-02, size 1.00 m x 1.20 m x 1.10 m, drawing 3202.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,102 lbs. (500 kg) for Basket CT-01, 1,102 lbs. (500 kg) for Basket CT-02; 1,102 lbs. (500 kg) for Basket C-1; 1,102 lbs. (500 kg) for Basket C-2; 820 lbs. (372 kg) for Basket C-0, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope Temperature</u>	1. Never exceed 130°C (266°F). 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two or more standard cylinders must be present (see NOTE 4, NOTE 10, and NOTE 11).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	50-01 onwards.

XL- Model S-70, Hot Air Balloon, Approved May 28, 2014

<u>Envelope</u>	Volume: 70,000 cu. ft. (1982 m <sup>3</sup> ) Drawing: 1063. Gores: 16 Disposition: Horizontal Max. Diameter: 53 ft. (16.2 m) Total Height: 66 ft. (20.0 m)
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<u>Air Heater</u>	Single or Double Burner ULTRAMAGIC MK-21, drawing 2021 or 2022. Single or Double Burner ULTRAMAGIC BMK-008, drawing 2031 or 2032. Double Burner ULTRAMAGIC MK-32, drawing 2062.
<u>Baskets</u>	Model CT-02, size 1.00 m x 1.20m x 1.10 m, drawing 3202. Model CT-01, size 0.8 m x 1.0m x 1.10 m, drawing 3200. Model C-1, size 1.2 m x 1.0 m x 1.03 m, drawing 3001. Model C-2, size 1.0 m x 1.0 m x 1.03 m, drawing 3002. Model C-0, size 0.7m x 0.8m x 0.90 m, drawing 3000.
<u>Fuel</u>	Commercial LPG or Propane.
<u>Maximum Weight</u>	1,135 lbs. (515 kg) for Basket CT-01; 1,433 lbs. (650 kg) for Basket CT-02; 1,433 lbs. (650 kg) for Basket C-1; 1,433 lbs. (650 kg) for Basket C-2; 848 lbs. (385 kg) for Basket C-0, or the weight resulting in maximum continuous envelope temperature of 100°C (212°F), whichever is the lesser. See Approved Flight Manual.
<u>Allowable Envelope</u>	1. Never exceed 130°C (266°F). Temperature 2. Maximum continuous 120°C (248°F).
<u>Minimum Crew</u>	One (1) Pilot.
<u>Minimum Fuel Required</u>	Two or more standard cylinders must be present (see NOTE 4, NOTE 10, and NOTE 11).
<u>Fast Deflation System</u>	Optional. See NOTE 5.
<u>Serial No's Eligible</u>	70-01 onwards.

#### DATA PERTINENT TO ALL MODELS

<u>Import Requirements</u>	The FAA can issue a U.S. standard airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a representative of the Direccion General de Aviacion Civil of Spain 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 the U.S. airworthiness regulations 14 CFR Part 31 approved under U.S. Type Certificate No. B02CE and to be in a condition for safe operation.'
<u>Certification basis</u>	FAR 21.29 and FAR 31, effective on January, 1990, as amended by 31-1 through 31-5 inclusive. Application for Type Certificate dated June 5, 1997.  Equivalent level of Safety findings per provision of 14 CFR 21.21(b)(1): ACE-08-15 of August 1, 2008, Burners, FAR 31.47(d) ACE-08-15A of November 05, 2013, Burners, 14 CFR part 31.47(d), for Model S-70  Special Conditions 31-001-SC applicable to MK-32 model burners.  The Direccion General de Aviacion Civil originally type certificated this aircraft under its type certificate Numbers 3, 4, 18, 61, 147 and

247. The FAA validated these products under U.S. Type Certificate Number B02CE. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Spain.

Validation date

Type Certificate B02CE issued March 6, 1998

Type Certificate B02CE was issued pursuant to FAR 21.29, in validation of the Direccion General de Aviacion Civil of Spain's certification of compliance with the aforementioned certification basis.

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 ULTRAMAGIC, S.A. Flight Manual. (see Note 7)

Maintenance and Inspection

Maintenance and inspection must be carried out in accordance with the ULTRAMAGIC, S.A. Flight and Maintenance Manual, Revision 2, dated January 30, 1998, or later issue.

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 September 28, 2003 – by the Direccion General de Aviacion.

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

The FAA accepts such documents and considers them FAA-approved 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.

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 and Maintenance 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 ULTRAMAGIC, S.A. Maintenance Manual.

NOTE 4

The approved types of fuel cylinders for all models are as follows:  
Worthington cylinder 4100-U4-27.  
ULTRAMAGIC cylinder type M-20 or M-20D.  
ULTRAMAGIC cylinder type M-30 or M-30D.  
ULTRAMAGIC cylinder type M-40 or M-40D.  
ULTRAMAGIC cylinder T-25.

NOTE 5

The optional FDS system of deflation may be installed in accordance to drawings 1031/72, 1031/75 and 1031/76.

NOTE 6

deleted

NOTE 7

ULTRAMAGIC flight manual Document: FM04US Initial Issue Revision 1 dated July 29, 2008 or later versions are required for models H-31, M-42, M-56, M-77C, M-120, N-425.

NOTE 8

MK-21 Electric burner option is approved for use with all balloons from 56,000 cu ft and above; MK-21 / ELEC, drawing 0100-0000-0200.

NOTE 9

Approved combinations of Ultramagic envelopes with parts of other balloon manufacturers are defined by the following supplements to the ULTRAMAGIC flight manual Document: FM04US Initial Issue Revision 1 dated July 29, 2008 or later versions:

- Balóny Kubíček spol. s.r.o.(B04CE):  
Supplement 4 US, Issue 2, or later approved revisions
- Aerostar International, Inc. (A15CE, Raven Industries):  
Supplement 13 US, Issue 2, or later approved revisions
- Cameron Balloons Ltd. (B1EU) and Cameron Balloons US (B1GL, B2GL, B3GL, B4GL):  
Supplement 29 US, Issue 2, or later approved revisions
- Cameron Balloons Ltd. (B2EU, B3EU, Thunder&Colt):  
Supplement 30 US, Issue 2, or later approved revisions
- Lindstrand Balloons Ltd. (B82EU, B87EU) and Lindstrand Balloons USA, Inc. (B00010CH):  
Supplement 31 US, Issue 2, or later approved revisions
- Cameron Balloons Ltd. (B01CE, Sky Balloons Ltd.):  
Supplement 33 US, Issue 2, or later approved revisions

NOTE 10

External mounting CT-01 and CT-02 baskets of any the following fuel cylinders combinations is approved:

two Worthington 4100-U4-27,  
two UM Type M-20 /M-20D,  
two UM Type M-30 /M-30D,  
four Worthington 4100-U4-27,  
four UM Type M-20 /M-20D  
four UM Type M-30 /M-30-D,  
two Worthington 4100-U4-27 plus two UM Type M-20 /M-20D,  
two Worthington 4100-U4-27 plus two UM Type M-30 /M-30D,  
two UM Type M-20 /M-20D plus two UM Type M-30 /M-30D

NOTE 11

Additional compatibility information: Basket CT-01 is approved for flight using the following burners:

- MK-21 Single (or MK-21/ELEC single)
- BMK-008 Single.

## NOTE 12

Additional compatibility information: Basket CT-02 is approved for flight using the following burners:

- MK-21 Single or Double (or MK-21/ELEC Single or Double)
- BMK-008 Single or Double.

-End-