DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A33CE
Revision 11
NATIONAL BALLOONING
752
752-12
755-12
858
January 29, 2008

TYPE CERTIFICATE DATA SHEET NO. A33CE

This data sheet which is part of Type Certificate No. A33CE 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: National Ballooning
2004 W. Euclid Ave.
Indianola, Iowa 50125

I - Model 752, Hot Air Balloon, Approved July 15, 1981

Envelope National Ballooning, Drawing GE-02-30, Sheet 1; or GE-02-30, Sheet 3; or GE-02-30 Sheet 4

Air Heater National Ballooning burner assembly, Drawings B10F6, B20F6, B30F6, B40F6, F50F6, and B60F6


Fuel Commercial LPG

Maximum Weight Gross weight limited to 1,430 lb. or to weight requiring maximum continuous envelope temperature of 250° F., whichever is less. See Balloon Flight Manual.

Allowable Envelope Temperature
1. Never exceed: 275° F.
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250° F. to 275° F.

Minimum Crew One (1) pilot

Fuel Capacity Two, three, or four 10 gal. (at 80% fill) vertical tanks, National Ballooning P/N EC-01-30-7

Serial Nos. Eligible 001 and up
See NOTE 1
### II - Model 858, Hot Air Balloon, Approved July 15, 1981

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelope</td>
<td>National Ballooning, Drawing GE-02-30, Sheet 1; or GE-02-30, Sheet 3; or GE-02-30 Sheet 4</td>
</tr>
<tr>
<td>Air Heater</td>
<td>National Ballooning burner assembly, Drawings B10F6, B20F6, B30F6, B40F6, P50F6, and B60F6.</td>
</tr>
<tr>
<td>Fuel</td>
<td>Commercial LPG</td>
</tr>
<tr>
<td>Maximum Weight</td>
<td>Gross weight limited to 1,450 lb. or to weight requiring maximum continuous envelope temperature of 250° F., whichever is less. See Balloon Flight Manual.</td>
</tr>
</tbody>
</table>
| Allowable Envelope Temperature | 1. Never exceed: 275° F.  
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250° F. to 275° F. |
| Minimum Crew       | One (1) pilot                                                                                                                                |
| Fuel Capacity      | Two, three, or four 10 gal. (at 80% fill) vertical tanks, National Ballooning P/N EC-01-30-7                                               |
| Serial Nos. Eligible | 101 and up  
See NOTE 1                                                                                                                         |

### III - Model 752-12, Hot Air Balloon, Approved May 4, 1982

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelope</td>
<td>National Ballooning, Drawing GE-02-30, Sheet 1</td>
</tr>
<tr>
<td>Air Heater</td>
<td>National Ballooning burner assembly, Drawings B10F6, B20F6, B30F6, B40F6, F50F6, and B60F6.</td>
</tr>
<tr>
<td>Gondola</td>
<td>Elite Chariot, Drawings EC-01-30, EC-02-30, EC-03-30, EC-04-30, and EC-05-30, E-01-12CTC, E-02-12CTC</td>
</tr>
<tr>
<td>Fuel</td>
<td>Commercial LPG</td>
</tr>
<tr>
<td>Maximum Weight</td>
<td>Gross weight limited to 1,220 lb. or to weight requiring maximum continuous envelope temperature of 250° F., whichever is less. See Balloon Flight Manual.</td>
</tr>
</tbody>
</table>
| Allowable Envelope Temperature | 1. Never exceed: 275° F.  
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250° F. to 275° F. |
| Minimum Crew       | One (1) pilot                                                                                                                                |
III - Model 752-12, Hot Air Balloon, Approved May 4, 1982 (continued)

Fuel Capacity Two, three, or four 10 gal. (at 80% fill) vertical tanks, National Ballooning P/N EC-01-30-7

Serial Nos. Eligible 0121 and up
See NOTE 1

IV - Model 755-12, Hot Air Balloon, Approved June 5, 1989

Envelope National Ballooning, Drawing GE-02-30, Sheet 3

Air Heater National Ballooning burner assembly, Drawings B10F6, B20F6, B30F6, B40F6, P50F6, B5A0F6, and B60F6


Fuel Commercial LPG

Maximum Weight Gross weight limited to 1,270 lb. or to weight requiring maximum continuous envelope temperature of 250° F., whichever is less. See Balloon Flight Manual.

Allowable Envelope Temperature
1. Never exceed: 275° F.
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250° F. to 275° F.

Minimum Crew One (1) pilot

Fuel Capacity Two, three, or four 10 gal. (at 80% fill) vertical tanks, National Ballooning P/N EC-01-30-7

Serial Nos. Eligible 55120 and up
See NOTE 1

Data Pertinent to All Models

Certification Basis Part 31 of the Federal Aviation Regulations dated July 1, 1964, as amended by 31-1, 31-2, and 31-3, plus Section 31.27 of Amendment 31-4. Also, Section 31.82 of Amendment 31-4 for Model 752-12 only. Application for Type Certificate dated August 29, 1979.

Production Basis Production Certificate No. 324CE, all Models 752, 752-12, 858, and 755-12 balloons except as noted below:

TC Only
Model 752, S/N 002 through 004
Model 858, S/N 104
Model 755, S/N 55120 and 55121
Data Pertinent to All Models (continued)

**Equipment**

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification, except for safety belts.

In addition to the above required equipment, the following equipment is also required:

1. Burner lighter - sparker, matches, or equal (2 required)

2. FAA Approved Balloon Flight Manual

**Maintenance and Inspection**

1. The following maintenance must be performed at each annual inspection:
   Replace "O" ring stem seal of quick valves.

2. Annual 100-hour inspections required by FAR 91.169 must include inspection of fabric condition.

3. Envelope must be inspected for heat damage, including strength tests of fabric, if temperature tabs show temperature of 280° F. has been exceeded. Temperature tabs are installed on seams at the edge of deflation port top of seam No. 14 on Model 752, seam No. 8 or 9 on Models 752-12 and 755-12, and seam Nos. 18 and 19 on Model 858.


5. Criteria for repairing the envelope fabric must be obtained from National Ballooning and must be accomplished in accordance with Advisory Circular (AC) 43.13.

6. Inspect pilot light each 25 hours of burner operation. If erosion of burner shell is noted, replace shell.

**NOTE 1.** Each hot air balloon envelope must have an individual registration number. An individual envelope is eligible for a Standard Airworthiness Certificate when mated with any approved combination of gondola and burner assembly for that model balloon. Change to an eligible combination must be documented by making a logbook entry endorsed by Pilot-in-Command or certified mechanic.

**NOTE 2.** For the purpose of maintenance and inspection, operation records (Logbooks) must be maintained with each hot air balloon envelope. If burner assemblies are interchanged, separate records must be maintained for the burner.

....END....