



Australian Government

Civil Aviation Safety Authority

TYPE CERTIFICATE

Number: VL508


Pursuant to Regulation 21.013A of the Civil Aviation Regulations 1998, This Type certificate is issued to Kavanagh Investment Trust in respect of the BOX-90 Hot Air Balloon.

This certificate is valid until suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as prescribed in Type Certificate Data Sheet Number VL508 issued by this Authority.

Date of application: 01 December 2009

Date of Issuance: 11 December 2009

Model BOX-90 Approved 11 December 2009



Peter Boyd
Delegate of the Authority

Number: VL508
Revision: Original Issue
Aircraft: Kavanagh BOX-90
Date: 11 December 2009

TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of the Type Certificate No.VL508, lists the conditions and limitations under which the aircraft for which the Type Certificate was issued meet the airworthiness requirements of the Civil Aviation Safety Authority.

Type Certificate Holder: Kavanagh Investment Trust
PO Box 53
Mount Kuring-Gai,
NSW, 2080
Australia

MODEL: KAVANAGH BOX-90

Manned free special shape balloon with twenty four loaded internal curtains radiating outwards to the external shape, being an oblong box shape approximately 16 metres by 9 metres and 19.1 metres high. The BOX-90 balloon is defined in the general assembly drawing KAV-BOX90-10-001.

Eligible Equipment

The burner, basket and load frame variants are also listed in tables in Section 7 of the Kavanagh Balloons Hot Air Balloon Flight Manual - Issue 1, March 2008 or later CASA approved revision.

Model	Vol (Ft ³)	Vol (M ³)	Drawing	GCW (kg)	Burner	Basket	Load Frame
BOX-90	90,000	2549	KAV-BOX90-20-01	902	C	B	A
BOX-90	90,000	2549	KAV-BOX90-20-01	760	C	A	A

BURNER

Designation	Part Number	Drawing Numbers
C	KBS3-2	KAV-GEN-41-001

[illegible]

BASKETS

BASKETS		
Designation	Part Number	Drawing Numbers
A	KLW1010, KLW1011, KLW1210	KAV-GEN-30-002
	KOB1010, KOB1110, KOB1210	KAV-GEN-30-001
B	KOB1410, KOB1510, KOB1610	KAV-GEN-30-001

LOAD FRAMES

LOAD FRAMES		
Designation	Part Number	Drawing Numbers
A	KLF7661-44	KAV-GEN-43-001

Envelope:

Envelope shown in drawing KAV-BOX90-20-01

Gross Certificated Weight (GCW): See above table.

Envelope Temperature:

The envelope temperature must not exceed 120°C.

Minimum Crew:

One (pilot).

Maximum Occupants:

Not to exceed certificated maximum weight and limitations. Refer to Kavanagh Balloons Hot Air Balloon Flight Manual Issue 1 and Flight Manual Supplement 9.2 Special Shape Envelopes Issue 1 or later CASA approved revision.

Fuel:

Commercial LPG or Propane.

Fuel Quantity:

As a minimum, all balloons must carry a number of fuel tanks fitted with regulated vapour outlets equal to the number of vapour supply hoses on the burner. As a minimum, all balloons must carry at least one fuel tank for each liquid supply hose on the burner. Additional fuel tanks of each type may be carried.

Airworthiness Category:

Manned Free Balloon

Certification Basis:

CASR Part 31, Airworthiness standards for manned free balloons dated 1st October 1998. Civil Aviation Order 101.54 Issue 2 dated 23 December 2004. Equivalent safety accepted against paragraph 3.3, Heater endurance test, on grounds of safe history of operation. File F86/253 refers.

BCAR Part 31, Issue 2, dated 12th May 2003.

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