

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 Boydana

Delegate of the Authority

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Safe Skies for All

Number: VL508

Revision: Original Issue

Aircraft: Kavanagh BOX-90

Date: 11 D

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

BURNER

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

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BASKETS

BASICEIS		Drawing Numbers
Designation	Part Number	
Λ	KLW1010, KLW1011, KLW1210	KAV-GEN-30-002
Λ	KOB1010, KOB1110, KOB1210	KAV-GEN-30-001
D	KOB1410, KOB1510, KOB1610	KAV-GEN-30-001
<u> </u>	KOB1410, KOB1510, KOB1010	

LOAD FRAMES

LOAD FRAMI	72	
Designation	Part Number	Drawing Numbers
Λ	KLF7661-44	KAV-GEN-43-001
Λ	ICEA 7001 11	

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^{0} 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

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

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Drawing List:

Sealed Drawing List BOX90-1 dated 7 December

2009, or later CASA approved issue.

Production Basis:

CASA Production Certificate No. 049101

Eligible Serial Numbers:

BOX90-405

Equipment:

Equipment is listed in the Approved Kavanagh Hot Air Balloon Flight Manual - Issue 1, March

2008 or later CASA approved revision.

Operation and Service Instructions

1. Flight Manual:

Kavanagh Balloons Hot Air Balloon Flight Manual - Issue 1, March 2008 and Flight Manual Supplement 9.2 Special Shape Envelopes Issue 1 or later CASA approved revision.

2. Maintenance Manual:

Kavanagh Balloons Maintenance Manual Issue 4, Revision 0, dated 1st March 2007 (or later

revision).

3. Airworthiness Limitations:

Kavanagh Balloons Maintenance Manual Issue 4,

Revision 0, dated 1st March 2007 (or later

revision).

Notes

Note 1:

For the purpose of maintenance and inspection a logbook must be maintained with each balloon envelope. If the bottom end components (basket burner, fuel tanks, and instruments) are interchanged with other balloon envelopes, they must be listed in the log book of each envelope with which they are used or, alternatively, a separate log book must be maintained for the components being interchanged.

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