



Australian Government

Civil Aviation Safety Authority

TYPE CERTIFICATE

Number: VL506 Issue 2

This certificate, issued to Kavanagh Investment Trust, certifies that, pursuant to Regulation 21.13A of the Civil Aviation Regulations 1998, approval is granted for the following aircraft:

Model D-77 Hot Air Balloon
Model D-84 Hot Air Balloon
Model D-90 Hot Air Balloon
Model D-105 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 VL506 issued by this Authority.

Date of application:

1 September 2005

Date of issuance:

11 April 2008



Dinh Nguyen
Delegate of the Authority

Safe Skies for All

Minimum crew: One pilot.

Fuel capacity: see Note 1.

Serial Nos. Eligible: D77-348 to D77-376 inclusive.

2. Model D-84

Hot Air Balloon (Manned Free Balloon Category)
Approved 12 January 2006.

Envelope: Kavanagh envelope, drawing KAV-D-20-001.

Volume: 2379 cubic metres.

Air Heaters: Kavanagh Series 1, single or double burner
Kavanagh Series 2, single or double burner
Kavanagh Series 3, single or double burner

Basket: Kavanagh basket options as shown in drawing KAV-GEN-30-001 or KAV-GEN-30-002.

Fuel: Commercial LPG or propane.

Maximum weight: Gross weight limited to 824 kg, or to highest weight allowed by the loading system in Section 5 of the Kavanagh Hot Air Balloon Flight Manual, whichever is less.

Maximum envelope temperature: 120 degrees Celsius.

Minimum crew: One pilot.

Fuel capacity: see Note 1.

Serial Nos. Eligible: D84-322 (This is the only D-84 made under this TC)

3. Model D-90

Hot Air Balloon (Manned Free Balloon Category)
Approved 12 January 2006.

Envelope: Kavanagh envelope, drawing KAV-D-20-001.

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Volume: 2549 cubic metres.

Air Heaters: Kavanagh Series 1, single or double burner
Kavanagh Series 2, single or double burner
Kavanagh Series 3, single or double burner

Basket: Kavanagh basket options as shown in drawing KAV-GEN-30-001 or KAV-GEN-30-002.

Fuel: Commercial LPG or propane.

Maximum weight: Gross weight limited to 902 kg, or to highest weight allowed by the loading system in Section 5 of the Kavanagh Hot Air Balloon Flight Manual, whichever is less.

Maximum envelope temperature: 120 degrees Celsius.

Minimum crew: One pilot.

Fuel capacity: see Note 1.

Serial Nos. Eligible: D90-342 to D90-374 inclusive.

3. Model D-105 Hot Air Balloon (Manned Free Balloon Category)
Approved 12 January 2006.

Envelope: Kavanagh envelope, drawing KAV-D-20-001.

Volume: 2973 cubic metres.

Air Heaters: Kavanagh Series 1, single or double burner
Kavanagh Series 2, single or double burner
Kavanagh Series 3, single or double burner

Basket: Kavanagh basket options as shown in drawing KAV-GEN-30-001 or KAV-GEN-30-002.

Fuel: Commercial LPG or propane.

Maximum weight: Gross weight limited to 1030 kg, or to highest weight allowed by the loading system in Section 5 of the Kavanagh Hot Air Balloon Flight Manual, whichever is less.

Maximum envelope temperature: 120 degrees Celsius.

Minimum crew: One pilot.

Fuel capacity: see Note 1.

Serial Nos. Eligible: D105-333 to D105-359 inclusive.

Data pertinent to all models

Production Basis: Production Certificate No. 049101.

Certification basis: CASR 31, dated 1st October 1998, CAO 101.54 at amendment 102 with the applicant electing to use BCAR 31, Issue 2, dated 12th May 2003.

Drawing list Sealed Drawing List No. D-3 applicable to Type D Kavanagh
Balloons, dated 30th August 2005 (or later revision approved
by CASA).

Notes

1. Fuel Capacity Balloons fitted with a single burner must carry at least one master tank as specified in drawings KAV-GEN-30-001 or KAV-GEN-30-002 as applicable. Additional master and slave tanks as specified in these same drawings may be carried as desired by the pilot.

Balloons fitted with a double burner must carry at least two master tanks as specified in drawings KAV-GEN-30-001 or

KAV-GEN-30-002 as applicable. Additional master and slave tanks as specified in these same drawings may be carried as desired by the pilot.

2. Flight Manuals Kavanagh Balloons Hot Air Balloon Flight Manual - Issue 1, March 2008 and Supplements or later CASA approved revision.
3. Maintenance: Airworthiness Limitations and maintenance requirements are specified in the Kavanagh Balloons Maintenance Manual, Issue 4, Revision 0, dated 1st March 2007 (or later revision)
4. Type Certificate VL506 supersedes Certificate of Type Approval 148-1, Issue 2, for Type D Balloons, Serial Numbers 322 to 376.
- CTA 148-1 remains active for all other serial numbers lower than 322.
- For serial numbers higher than 376 refer to Australian Type Certificate (TC) VL507 which consolidates all Kavanagh Balloon models into one TC.
5. Revision history: Revision 1 of this TCDS:
- (a) Reformats the TCDS for consistency with other models;
 - (b) Makes minor corrections to envelope volumes;
 - (c) Introduces an closing serial number;
 - (d) Introduces a common flight manual.

- END -

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