

Waikato Whispers



Waikato Hot Air Balloon Club: www.waikatoballoonclub.co.nz Tel:07 856 0060

Club Night: At the Club Night meeting there was some confusion over the Transit Lanes as part of the Hamilton Zone.

CAA Rule Part 71. 57 VFR Transit Lanes

- (a) The Director may designate a portion of controlled airspace as a VFR transit lane for either or both of the following purposes:
 - (1) separating transiting VFR traffic from arriving and departing IFR flights:
 - (2) permitting transiting VFR traffic to operate within the VFR transit lane without requiring an ATC clearance.
- (b) A VFR transit lane must be clear of airspace that encompasses IFR arrival and departure procedures within that controlled airspace.
- (c) The Director must—
 - (1) ensure that buffer zones are provided between the nominal flight paths of arriving and departing IFR flights and each VFR transit lane; and
 - (2) identify each VFR transit lane by the ICAO nationality letters of the State providing the air traffic control service followed by the letter “T” followed by a number.
- (d) A VFR transit lane is class G airspace and may only be active during the day.

Feedback from Megan Malcom – ATC Hamilton

- Height –
YES, 1000ft and below. This is marked on the VNC. All levels on VNCs refer to height above Mean Seal Level (eg HN airfield is 172ft AMSL so the transit lanes are effectively 800ft AGL)
- Transponder – optional. The special note states aircraft SHOULD have a transponder, not MUST have
CORRECT – Transponders are not required in Transit Lanes/Class G airspace. The benefit of transponders is that we can offer information to anyone we know to be using the transit lane, but balloons are usually easily seen!
- Incoming IFR flights – aircraft using the transit lane may be requested to leave the transit lane for an incoming IFR aircraft
NO – We have no jurisdiction over Transit Lanes. No clearance is required to operate within and no denial from ATC can be given. When it is busy at the aerodrome we occasionally “suggest” pilots (fixed wing or rotor) use the transit lanes. Note: The Rescue Helicopters regularly transit in and out of the hospital to and from the North without talking to us.
Radio – do aircraft using the transit lane need clearing from Air Traffic Control
This is a bit of a grey area. The CFZ surrounding the Transit Lane to the north and Control Zone to the south, both requiring radio with a slither of Class G (Transit Lane) in the middle with no Radio requirements. Your benefit is you’re easily seen. No clearance required.
- Balloons – do balloons have the same privileges as other aircraft when operating within the transit lane.
YES – There are no limitations that I am aware of and whether fixed, rotary or Balloon you are all General Aviators and the Airspace is uncontrolled.

Thanks to John Clulow for the Rule reference and Megan for clarifying the Hamilton Zone.

To see a detailed image of zone boundaries www.airshare.co.nz/maps

Service Letter – emptying burner fuel hoses

Format Ref: CBL/TN/PJ2992
Issue: A Date: 31.01.17

Service Letter



1. General

(a) No.:	SL 1
(b) Revision / Date	A / February 2017
(b) Title:	Emptying of Burner Fuel Hoses
(c) Description:	Operators / Pilots are reminded of the importance of venting liquid fuel from the hoses of the Burner system after landing or ground test. Failure to carry out this action can result in permanent damage to the pressure gauge of the burner unit necessitating replacement.
(d) Applicability:	All burner types
(e) Effectivity:	All CNs

Note: Applicability= All types and variants to which the advice can be applied.
Effectivity= Actual CN or group of CN's to which the advice applies.

2. Accomplishment Instructions

Ref: Cameron Balloons Flight Manual, Section 4.6.3 'Action after landing'
and the instruction:

'Shut off and empty any fuel hoses not already shut down' [emphasis on 'empty' added]

Failure to follow this procedure at the end of each flight, or after any ground test of the burner system, can leave the burner hoses completely filled with liquid fuel. If they are disconnected from the fuel cylinders in this condition the self-seal poppet within the hose coupling will trap the liquid fuel within a fixed volume. Any subsequent slight increase in the temperature of the liquid within the hose or burner manifold will attempt to cause an expansion of the trapped fuel, which because it is held within a fixed volume will instead develop an increase in pressure.

This pressure increase can far exceed that which will occur in a fuel system where there is a vapour space above the liquid fuel, and can be such that only a few degrees of temperature rise can elevate the fuel pressure to above the maximum range of the burner Pressure Gauge. The gauge needle will then indicate the increasing pressure until it comes into contact with the back of the minimum reading 'stop' pin with sufficient force to either bend the needle, or cause the needle to slip on the central shaft. In either case the sensitive indicating gauge mechanism is permanently damaged and will no longer give a correct pressure indication.

The only corrective action possible is the replacement of the damaged Pressure Gauge.

This pressure rise behaviour within a trapped volume is purely a physical property of a fluid, and can affect any model of burner (or fuel system) made by any manufacturer.

Immediately after flight use, or ground testing, elements of the burner are likely to be at higher temperatures than the liquid fuel, and therefore failure to empty the fuel hoses at this time has a high probability of causing pressure gauge damage for the reasons explained above.



Example of Pressure Gauge damage

3. **Materials** none

4. **Other Publications Affected** none

5. **Remarks** none

Compiled by:

P Johnson

Notes:

Date: 1 Feb 2017

Name: Peter Johnson

6. Design Organisation Approval

Approval Statement

I hereby confirm that these instructions are in compliance with all the applicable airworthiness requirements. The technical content of this document is approved under the authority of DOA nr EASA.21J.140

Signed, for and on behalf of Cameron Balloons Ltd.

P Dow

Head of Design



Date: 01-02-2017

Name:

President	Nicholas Norris	021 213 8861	nnorris@ihug.co.nz
Chief Pilot	Dave Norris	021 351 957	nenya@ihug.co.nz
Secretary	Linda Norris	0275 386 206	bellan@vodafone.co.nz
Treasurer	Dave Norris	021 351 957	nenya@ihug.co.nz
Whispers	Dave Norris	021 351 957	nenya@ihug.co.nz