

Australian Ballooning Federation

PILOTS CIRCULAR

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Thanks to all the pilots around Australia and others who have contributed to this issue.

Pilots Circular is produced by the Australian Ballooning Federation Inc., and contains operational and safety information for all Australian balloonists.

ABF pilot and student pilot members receive Pilots Circular (and a PC folder) by post as part of their annual membership. PC is also available on the ABF website www.abf.net.au for the benefit of non-pilot members.

All ABF members – from the newest student to the most experienced pilot – are invited to contribute to PC on any issues you feel other pilots may wish to know about, or to raise questions that you would like information about.

*Contributions should be sent to: PC Editor Simon Fisher
phone or fax 08 8172 0196
email sfisher@picknowl.com.au.*

URGENT for C of R holders

Flight Manuals action required before August 16

From 16 August 2002, all aircraft certificate of registration holders will need to comply with new rules for aircraft flight manuals (*not* maintenance manuals). The new rules mean that the registration holder will be responsible for ensuring that all required flight manual information is correct and current. This replaces the old system in which registration holders were required to seek CASA approval for flight manuals and any flight manual changes.

The new system is explained in a small spiral bound CASA booklet *The New System for Aircraft Flight Manuals* which was posted to all C of R holders recently.

What you need to do

1. If you did not receive the booklet or if you have any questions about it, call the CASA hotline on 1800 113 323 (9am to 5pm EST on weekdays).
2. As detailed in the booklet, you must check with your balloon manufacturer that you have a full current manual for your balloon (Kavanagh Balloons are writing to owners of their

balloons with advice about this). You should also make sure you obtain any future flight manual amendments from the manufacturer.

3. Then you must fill in the application form at the back of the booklet and fax or post it to your nearest CASA office (listed on page 25 of the booklet) before August 16.

Some notes on filling in the form

On the application form put the details *for the envelope only*, as this is what carries the registration letters and is the 'aircraft'. Do not put any other details at this stage.

Person or organisation managing the AFM – is the C of R holder (unless someone else is contracted to do this, which may apply with some commercial balloon operations).

Type certificate number for your balloon – is normally found in the 'Balloon Build Standard' data, either at the front of your logbook or on a separate sheet kept with it. If you can't locate it, ask the balloon manufacturer. The make, model and serial number are also in the front of the logbook, and on the envelope ID plate.

AFM identification – look for the issue number and date at the top of the Log of Pages near the front of the Flight Manual. Ignore any different issue dates on other pages. If the flight manual for your balloon does not have a part number or document number, just put its issue number and title, followed by the issue date on the next line of the form.

The next steps will be:

4. On receiving your application, CASA will send you back an Approval Page and an Amendment Record Sheet to be placed at the front of your balloon flight manual.
5. You will be required to sign and date the Amendment Record Sheet when you receive it.

What if my balloon has components from different manufacturers?

If your balloon has components supplied by different manufacturers than the envelope than the one who made the envelope, you should also check the flight manuals of those other manufacturers. You need to find out whether there are any operational requirements for those components which are *different from* or *additional to* the requirements listed in the flight manual for the envelope. This is not usually the case, but it could be.

If there *are* any flight manual amendments or supplementary information which apply, either from the envelope manufacturer or the manufacturer of another component, they should be noted on the Amendment Record Sheet *before you sign it*.

6. You must then send a copy of the Amendment Record Sheet to CASA. Any future amendments or supplements should also be noted as they occur, and a copy sent to CASA whenever this happens.

Do any ADs apply to the flight manual?

The booklet says you should include in the flight manual any operational requirements which are found in CASA Airworthiness Directives. The current balloon ADs (up to AD/BAL/21) do not have any such requirements, as they are all related to maintenance not operations. ☺

AD/BAL/3 Amendment 4 on 10 yearly tank inspections

Amendment 4 to AD/BAL/3 took effect on 11 July 2002, and a copy has been sent by CASA to all balloon C of R holders. There are two points to note:

1. As a result of this amendment, ***balloon LPG tanks NO LONGER REQUIRE A TARE MASS TEST as part of their ten yearly inspection.*** The tare mass test is not required under the Australian Standard, and most testing stations are not equipped to do it. This has been one reason why some testing stations have declined to inspect balloon tanks.

Hydrostatic testing is quite separate, and will be required if either the manufacturer's maintenance manual specifies it or it is considered necessary by the testing station after visual inspection of the inside and outside of the tank. If you have difficulty finding a suitable testing station in your area, the ABF Operations Manager may be able to help.

2. Note 6 to the amendment reminds us that ***tank fittings must not be altered without the approval of the balloon manufacturer.***

Any replacement fittings should be supplied by the manufacturer with an appropriate release note, and should be fitted by a balloon MA holder or Certificate of Approval holder. A gas fitting station is only approved to do the ten yearly inspection and testing.

Thanks to CASA staff Dave Villiers and Eugene Holzapfel for their co-operation and assistance in producing this amendment.

C of R holder responsibility for maintenance generally

It is your responsibility as a balloon C of R holder to know exactly what maintenance is required on your balloon and when. You should have the current maintenance manual for the balloon and a copy of any CASA requirements including a full set of balloon Airworthiness Directives (AD/BAL/1 to AD/BAL/21 as at July 2002). If you do not have a full set, you can get copies from Airservices Publications Centre or the CASA website www.casa.gov.au. New ADs are sent free to all C of R holders.

If you get work done on your balloon by an authorised person (eg a balloon MA), it remains your responsibility to know what needs doing, to specify the work, and to see that it has been done and signed off. The authorised person is simply responsible for the quality of the work they sign for. So if something should have been done, and you didn't request it, it's your lookout! ☺

Ham Radio Warning

David Tanner of Amateur Radio VK3AUU, email vk3auu@vic.australis.com.au has advised that some balloonists and hang gliders may be illegally using unlicensed Amateur Radio gear in the 2 metre band. This type of equipment has been sold through pawnshops and other second hand outlets and is most likely stolen. An Amateur Radio licence is required to use this and penalties apply for unlicensed use, including confiscation of equipment.

UHF is the usual balloon to crew radio system. ☺

Fabric Incident Report

Summary

It was the pilot's first flight in his recently purchased second-hand 56 with one passenger aboard. The logbook showed a total of 220 hours and less than 6 hours since the last annual inspection. A preflight check of the envelope showed no damage. In ideal weather conditions, the pilot climbed slowly to 400ft AGL, then noticed a tear about 15cm long in the ripstop nylon fabric high in the balloon, and decided to abort the flight and land the balloon promptly. Before he had time to initiate a descent the tear quickly spread both horizontally and vertically, so that it became difficult to maintain buoyancy and to avoid obstacles on the landing approach even with increased use of the burner. A safe landing was made at an estimated descent rate of 350fpm.

After landing the damaged area measured 2.7 metres by 0.9 metres, virtually the whole panel. A fabric strength test was performed by a balloon MA (maintenance authority holder) later that day on three separate fabric panels, each of which tore at 8kg strain, well below the fail point of 14kg specified in the manufacturer's maintenance manual.

National Safety Officer comments

The previous owner of the balloon was also an MA holder, who had carried out the annual inspection on his own balloon before selling it. He had also signed off a repair to an adjacent panel around 30 hours time in service earlier. A thorough examination of the logbook raised a number of serious questions regarding its accuracy as a record of the flying hours and maintenance history of the balloon.

ATSB investigated this incident, then CASA conducted its own investigation which resulted in the matter being referred to the Director of Public Prosecutions. The Maintenance Authority of the person who conducted the annual inspection has not been renewed.

The pilot had less than 20 hours as PIC, and this was in fact his first flight in his 'new' balloon. He is to be commended for keeping a cool head, remembering to brief his passenger for a hard landing, and making the landing safely in difficult circumstances.

Fabric which is seriously weakened is usually recognisably different in feel and appearance from 'healthy' fabric – flimsy to touch and obviously porous when you suck air through it. Fabric deterioration of this kind is not consistent with normal wear after 220 hours in service. Had the pilot been more experienced, he may well have recognised this problem before he bought the balloon.

Anyone considering buying a secondhand balloon is recommended to 'get a second opinion' from an independent MA holder or at least an experienced balloonist. A vendor who has nothing to hide should have no objection to this. I have personally seen another example of an envelope offered for sale which had 'passed' a recent annual inspection despite having dangerously porous and weak fabric.

An MA holder, on the other hand, could reasonably be expected to recognise fabric as weak as this, especially when repairing an adjacent panel. Any MA holder who has a concern about fabric strength should either conduct a fabric test or advise the balloon owner to have one done before making another flight.

If you have any concerns about maintenance authority holders or other persons authorised to do maintenance, or any other maintenance issues, please report these to the ABF Operations Manager and/or to CASA Airworthiness staff. ☺