

Review of Airworthiness

Check List Report – Hot Air Balloon



Operator:		Principal Maintainer:	
Job No:		Date review carried out:	Reg. mark: ZK-
Facility and Location where review was carried out:			

Notes for use: Refer to the notes on page 7 for further instructions on completing this report form.

Sections 1 through 10 are mandatory. Sections 11 to 14 are optional.

Where an item is **satisfactory** enter tick (✓) or **Y** into tick column, if **not applicable**, state N/A in the tick column.

Where an item is a **defect** enter the defect number from Section 9 in the tick column.

All defects listed in Section 9 will require maintenance action **prior to further flight** in accordance with the requirements of rule 91.603(a)(4).

1. Balloon Particulars						
	Envelope		Basket	Burner(s)		
Manufacturer:						
Model Part No:						
Serial No:						
TCDS No: (AC21-1 App2)						
TTIS:						
TSO:						
Fuel Cylinders	Make:	Part No:	Serial No:	Date of Man.	HydroStat. due:	PRV due:
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
Total hours from Technical Log				Is there an hours discrepancy?		
Maintenance Programme:						
Complete Balloon conforms to Type Certificate Data Sheets and acceptable design changes -						Yes?

2. Documents Carried in Balloon					
Airworthiness Certificate	Category(s)		Expiry date:		
Manufacturers Flight Manual	Doc:		Rev:		Current?
CAA Flight Manual	AIR:		A/L:		Current?
	Applicable supplements in Flight Manual - log of supplements & amendment record sheet current?				
Technical Log	Issue No:		Date:		
91.619	All maintenance, including defects and inoperative equipment/MEL items, recorded on current Technical Log appropriately rectified or deferred?				
	Technical Log contains all required current information?				
CAA 2173 Weight & Balance	Issue date:		Date last weighed:		Current per logbook?
	Within limits and accurate				Matches aircraft logbook
Certificate of Registration	Must be carried on NZ registered aircraft operating outside of NZ.				Carried?

3. Maintenance Logbooks		
<i>If not using CAA logbooks, identify which logbooks are being used.</i>		
3.1 Aircraft Logbook (CAA 2101)		Leading particulars recorded correctly?
91.605(g)(1)	Operator	Current operator and maintenance programme correctly identified?
Section 1 91.605(a)	Scheduled Maintenance Record	All due maintenance performed at intervals specified?
Section 2	Service Record	All maintenance due identified? Any ICAs for modifications included in programme? Escalation requirements being met?
Section 3 43.69	Maintenance Record	Accurate, correctly recorded and completed? Transferred from Technical Log?
43.105	Release-to-Service	All correctly completed, recorded and certified?
43.113	Duplicate Inspections	All carried out when required, recorded and certified?
43.103(a)(4)	Operational Flight Checks	All carried out when required, recorded and certified?

3.3 Aircraft Airworthiness Directives, Aircraft Modification, (CAA 1464)			
Section 1	ADs	All current & applicable to the aircraft. Assessed, recorded & certified?	
Section 2	Manufacturers/Vendors' Service Information	All maintenance performed or assessed in response to manufacturer's service information. Appropriately recorded?	
Section 3	Modification/ STC Record	All currently installed onto the aircraft and its components. Appropriately recorded & certified? (Refer also Section 5 of this check list)	
Section 4	Record Engines/Propellers installed	Current?	N/A
Section 5	Repetitive ADs	All current & applicable to the aircraft. Assessed, recorded & certified?	
Section 6 91.605(e)	Repetitive out of Phase	All applicable checks/inspections carried out, recorded & certified?	
	SSR transponder <input type="checkbox"/> First Aid Kit <input type="checkbox"/> Fire Extinguisher(s) <input type="checkbox"/> Floatation equipment <input type="checkbox"/> Radio Station <input type="checkbox"/> Weighing <input type="checkbox"/>		
	Manufacturer's inspections	Special inspections carried out and recorded?	
		Calendar inspections carried out and recorded?	
		Ageing aircraft programme requirements carried out and recorded?	
Section 7	Record of lifed components installed	All recorded and within limits (including overhaul)?	
Section 8 91.605(e)(9) &(10)	Weight & Balance Empty weight:	Summary correct? (Refer also Section 2 of checklist)	

4. Part 39 – Airworthiness Directive Status (Appropriate for components currently installed)			
Balloons	DCA/BAL/ 1	thru	
Aircraft General	DCA/GEN/ 1	thru	
Emergency Equipment	DCA/EMY/ 1	thru	
Instruments and Autopilots	DCA/INST/ 1	thru	
Any current AMOCs – list using 4 digit ID number			

5. STC, Modifications or Repairs recorded since the last Review (state nil if None)				
STC, Modification or Repair Ref. No.	Description	Date incorporated	Release-to-Service LAME or Authorisation No.	
All STCs, modifications & repairs correctly recorded and certified ,with applicable technical data iaw Part 21 App.D stated?				
<i>Have ICAs been included into the Maintenance Programme & identified in Logbook CAA 1464 Section 3?</i>				

6. Hot Air Balloon Physical Inspection							
Envelope	Satis <input type="checkbox"/>	Load Tapes	Satis <input type="checkbox"/>	Flying Cables	Satis <input type="checkbox"/>	Tempi-label max ind temp.____	Satis <input type="checkbox"/>
Parachute	<input type="checkbox"/>	Parachute lines & pulleys	<input type="checkbox"/>	Ripline	<input type="checkbox"/>	Grab Test	<input type="checkbox"/>
Turning Vents	<input type="checkbox"/>	Turning Lines	<input type="checkbox"/>	Basket	<input type="checkbox"/>	Modifications	<input type="checkbox"/>
Burners and Jets	<input type="checkbox"/>	Main Burner Valve	<input type="checkbox"/>	Whisper Burner Valve	<input type="checkbox"/>	Fuel Lines	<input type="checkbox"/>
Karabiners	<input type="checkbox"/>	Instrument Pack	<input type="checkbox"/>	Safety Equipment	<input type="checkbox"/>	Refer remarks over page	
6.1 General Condition Inspection – Balloon is in satisfactory condition?							
6.2 Overhaul and finite life components		Physical check/verification, where practicable, of Serial No's correct?					
6.3 Aircraft Identification and Placards		Type Certification ID plate fitted per 21.803?					
		Aircraft markings correct per 47.101 and 47.111?					
		Stainless steel identification plate fitted per 47.119?					
		Placards required by Part 26, Part 91, and flight manual (including supplements) fitted?					

7. Part 91 Subpart F – Instruments and Equipment Requirements		
91.503	Location of instrument and equipment	
91.507	Passenger information signs	
91.509	Minimum instruments and equipment	
91.513	VFR communication equipment	
91.515	Communication and navigation equipment – VFR over water	
91.523	Emergency equipment	
91.525(e)	Flights over water	
91.531	Oxygen indicators	
91.533	Supplemental oxygen for non-pressurised aircraft	
91.541	SSR transponder and altitude reporting equipment	
All required instruments and equipment fitted and airworthy. Yes?		

8. Remarks	Extra page(s) attached?

9. Defects Observed (state "nil" if None)		Extra page(s) attached?
No.	Description	Cleared?
IA sighted rectification maintenance records?		All defects rectified?

10. Certification (Review cannot be certified with open defects)		ZK -	
<i>"I certify that an (annual)* (biennial)* review of airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule 43.153(a) have been complied with"</i>			
Name:		Signature:	
IA/Authorisation No:		Certification Date:	
Date review carried out (for 30 day period):		Date Review next due:	

Send this completed report form to:

CAA, PO Box 3555, Wellington 6140

Email: ARA@caa.govt.nz

Fax: +64 4 560 9611

11. IA's follow up actions (Not mandatory to complete this section, refer Explanatory Notes overleaf)

43.153(c)	Uncleared defects recorded in Technical Log and Aircraft Logbook	
43.155(a)(1)	Review certification entered into Aircraft Logbook <i>Note: Useful to include next Review due date with certification</i>	
43.155(a)(3)	Enter due date of next Review in Technical Log	
43.155(a)(4)	Certified checklist report sent to CAA within 7 days of certification	
	OR – if Review not certified, sent to CAA within 7 days of the 30 day expiry period	

12. Part 91 Appendix A – Instrument and Equipment Specifications (Refer Explanatory Notes overleaf)

A.1	Markings and placards		A.14	Emergency equipment	
A.9	Communication and navigation equipment		A.16	Oxygen	
A.12	First aid kits		A.19	Oxygen equipment	
A.13	Fire extinguishers		A.22	Transponder equipment	

13. Recent maintenance providers/LAME's (Optional. Refer Explanatory Notes overleaf)

Explanatory notes for completing the Balloon Review Checklist Report

General

For all sections:

- enter a tick (✓) or Y in the appropriate column to indicate that the aircraft meets the applicable CAR requirements, or
- enter N/A if the requirement is not applicable to the aircraft or operation, or
- enter a defect number and detail the applicable defect in section 9 beside a corresponding defect number.

Section 1

The type certificate data sheet that the aircraft was type accepted into New Zealand under should be referred to. These are listed on AC21-1.2. List the envelope, basket and burner TCDS number and ensure that the aircraft conforms with its type certificate.

Maintenance programme – the balloon must be maintained to either an approved maintenance programme, the manufacturer's programme or an acceptable programme as applicable.

Section 2

Refer to the CAA web site www.caa.govt.nz 'aircraft' page for details of the latest manufacturer's flight manual and current CAA flight manual revision status. Titles of approved modifications and STCs are also provided.

Flight manual supplements – a copy of all supplements applicable to the fitted aircraft equipment must be kept in the flight manual.

Section 3

Alternative maintenance logbooks other than CAA 2101, CAA 2158, CAA 2110 or CAA 1464 may be used. However, any alternative maintenance logbook must be identified in this section and be formally accepted in writing by CAA.

Section 4

Identify the airworthiness directive range for each type of component that has been recorded and certified in CAA 1464.

Section 3 of this form also contains the check that the latest revision of each airworthiness directive has been recorded and certified in the appropriate logbooks.

The IA must check that the airworthiness directive record relates to the actual components fitted. Any airworthiness directives applicable to components replaced since the last Review must have been considered.

Section 5

List all modifications/repairs embodied since the last Review and check that any applicable conformity inspections have been carried out by an appropriately authorised person.

Section 6

Optional to complete listed individual physical inspection tick boxes providing 6.1 box completed.

It is recommended that the IA retains a list of sampled overhaul and finite lived components checked.

Aircraft markings – general exemption 98/EXE/69 applies provided that the aircraft has not been painted, repainted or remarked after 9 January 1998.

Section 7

Optional to complete listed individual required Instrument and Equipment tick boxes providing bottom box completed

Beside each item:

- enter a tick (✓) to indicate that the item is present and the condition of the item is satisfactory, or
- enter N/A if the requirement is not applicable to the aircraft or operation, or
- enter a defect number and detail the applicable defect in section 9 beside a corresponding defect number.

Section 8

List any appropriate remarks in this section, other than defects observed.

Section 9

All defects listed in this section will require clearing maintenance action prior to further flight in accordance with the requirements of Part 91.603.

The IA must sight satisfactory certified maintenance entries for all defects prior to certifying the Review .

Section 11

This section is an optional administrative checklist for the IA.

Section 12

These sections are optional. Relevant section(s) should be completed if any of the affected instruments or equipment have been replaced, or the aircraft role has changed within the last 12 months.

Section 13

Optional. Should be completed if the aircraft has had multiple maintenance providers over the last 12 months.