



## Airworthiness Directive

**AD No.:** 2018-0107  
**[Correction: 22 May 2018]**

**Issued:** 15 May 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

BALLONS CHAIZE  
 BALLONS LIBERT SPRL  
 BALLONSERVICE & TECHNIK  
 BALÓNY KUBÍČEK SPOL. S.R.O.  
 CAMERON BALLOONS LTD  
 LINDSTRAND TECHNOLOGIES LTD  
 NOUVELLE MANUFACTURE D'AEROSTATS  
 SCHROEDER FIRE BALLOONS GMBH  
 ULTRAMAGIC S.A.

### Type/Model designation(s):

Hot Air Balloons (see Applicability)

**Effective Date:** 29 May 2018

**TCDS Number(s):** Austria BA 009-ACG, EASA.BA.001, EASA.BA.002, EASA.BA.003, EASA.BA.004, EASA.BA.010, EASA.BA.012, EASA.BA.013, EASA.BA.014, EASA.BA.015, EASA.BA.016, EASA.BA.017, EASA.BA.019, EASA.BA.021, EASA.BA.022, EASA.BA.025, EASA.BA.026, EASA.BA.028, EASA.BA.030, EASA.BA.109, EASA.BA.119, EASA.BA.120, EASA.BA.501, EASA.BA.502, EASA.BA.503, EASA.BA.504, EASA.BA.505, EASA.BA.506, EASA.BA.517, EASA.SAS.BA.012, EASA.SAS.BA.023 and EASA.SAS.BA.025.

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 85 – Fuel Cell Systems – Lindstrand T30 Propane Cylinders – Removal from Service



**Manufacturer(s):**

114 (714) ZO Svazarmu, Aviatik Klub, Aerotechnik P.O.S., Aerotechnik s.r.o, Aerotechnik Podnik ÚV Svazarmu, Altisph'air, Annonay Air Concept, Ballons Libert Sprl, Ballons Chaize, Ballonservice & Technik, Balóny Kubíček spol. s.r.o., Cameron Balloons Ltd, Colt Balloons, Firma Johann Schön, Kubíček spol. s.r.o., Lindstrand Balloons Ltd (LBL), Lindstrand Hot Air Balloons Ltd, Llopis Balloons, Notheisz Balloons Hungary Kft., Pilatre De Rozier S.I.G.A. S.A., Schroeder fire balloons GmbH, Sky Balloons, SUP-AIR Ballon Egyesület, Thunder Balloons, Thunder & Colt, Ultramagic S.A., Lindstrand Technologies Ltd.

**Notes:**

1. The above list of manufacturers (some companies no longer exist) may not be complete, due to lack of historical data. In case a balloon manufacturer's name is not listed, that does not mean that this AD does not apply to that balloon – see the Applicability below.
2. The Lindstrand T30 cylinders were manufactured by Aeroecology (Russia) and introduced into service from 1995 with Lindstrand Hot Air Balloons Limited accepting Type Design responsibility for a batch of cylinders, some of which were allocated additional serial numbers.
3. Cameron Balloons Limited are the current Type Certificate Holder for some Types of Hot Air Balloons manufactured by Lindstrand Hot Air Balloons Limited.

**Applicability:**

All balloon types and models, as specified in the referenced TCDS listed above, all serial numbers.

**Definition(s):**

For the purpose of this AD, the following definitions apply:

**The SB:** Cameron Balloons Limited Service Bulletin (SB) 25, Revision 3.

**Affected cylinder:** Lindstrand T30 propane cylinders, Part Number CY050001, with a serial number as listed in the SB.

**Reason:**

A review of cylinder production records has shown that the affected cylinders have unacceptable welding defects.

This condition, if not detected and corrected, could result in an uncontrolled release of liquid propane and consequent fire or explosion, with consequent injury to balloon occupants and persons on the ground.

To address this potential unsafe condition, Cameron Balloons Limited issued the SB, providing instructions to remove the affected cylinders from service.

For the reasons described above, this AD requires replacement of the affected cylinders with serviceable parts.

This AD is re-published to correct the list of affected TCDS numbers. The TCDS EASA.SAS.BA.001 was erroneously introduced, and has been removed, as it is not for a hot air balloon.



**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Replacement:**

- (1) Within 30 days after the effective date of this AD, replace each affected cylinder with a serviceable part in accordance with the instructions of the SB.

**Part(s) Installation:**

- (2) From the effective date of this AD, do not install on any hot air balloon an affected cylinder.

**Ref. Publications:**

Cameron Balloons Limited SB 25, Revision 3 dated 07 November 2017.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 09 March 2018 as PAD 18-035 for consultation until 06 April 2018. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: Cameron Balloons Limited, Telephone +44 (0)117 9637216, E-mail: [technical@cameronballoons.co.uk](mailto:technical@cameronballoons.co.uk), website: <http://www.cameronballoons.co.uk/support>.



# Service Bulletin 25



## 1. General

(a) Service Bulletin No.:	25
(b) Revision / Date	4 / 06-June -2018
(b) Title:	Lindstrand T30 titanium fuel cylinders. Removal from Service
(c) Description:	This Service Bulletin removes a number of Lindstrand T30 Titanium fuel cylinders from service.
(d) Applicability:	Lindstrand T30 Titanium fuel cylinders listed in section 5.
(e) Effectivity:	All hot-air balloon types and variants where the Lindstrand T30 Titanium fuel cylinder is used (Part No CY050001)

**Note:** Applicability= All types and variants to which the change can be applied.  
Effectivity= Actual CN or group of CN's to which the bulletin has been/will be applied.

## 2. Background

The T30 cylinders were introduced into service in 1995. The issue concerning the fatigue life of these cylinders has now been resolved; however examination of the production records and further testing of the cylinders has shown that in some cases the cylinders are known to contain unacceptable weld defects. The cylinders listed in section 5 are therefore withdrawn from service with immediate effect. Cylinders NOT listed in section 5 may be returned to service.

**3. Compliance (Category)** Highly Recommended

**4. Consequences of Non-Compliance(Possible)**  
Uncontrolled leak of liquid propane.

## 5. Accomplishment Instructions

**Immediate action:** Check the serial number of Lindstrand T30 cylinders and remove the following T30 cylinder(s) from service. These cylinders are ineligible for use with any Cameron product AND unsuitable for the safe storage liquefied gases.

0227 / 0158      (Original manufacturer's serial number / LBL serial No)  
0316 / -  
0321 / -  
0322 / 0150  
0446 / 0152  
0534 / 0145  
0539 / -  
0543 / 0154  
0626 / 0153  
0638 / 0151

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# Service Bulletin 25



## **Within 7 days:**

1/ Empty any affected cylinder(s) of fuel and depressurise them.

## **Non-affected cylinders:**

Cylinders not listed above may be returned to service. Update the manuals as follows.

Cameron: Update HABFM by addition of supplement 8.52, update HABMM to amendment 4 and MM supplement 7.52 to issue 3.

or

Lindstrand: Update HABFM by addition of supplement 18 and update HABMM to amendment 10

## **6. Materials**

Cameron HABFM supplement 8.52 and HABMM amendment 4 and supplement 7.52 issue 3  
or Lindstrand HABFM supplement 18 and HABMM amendment 10

## **7. Other Publications Affected** None

## **8. Mass (Weight)/Balance:**

Update cylinder mass(es) as applicable.

## **9. Maintenance and Operating Instructions:**

The maintenance issue raised in section 10.2 of SB25 Issue 2 is addressed by the Cameron HABMM amendment 4 and supplement 7.52 issue 3 or Lindstrand HABMM amendment 10.

## **10. Additional Information**

**Note:** It is the owner's responsibility to render the affected cylinders unserviceable in accordance with EN12816 or applicable national regulations before disposal

**Emptying the fuel cylinders:** The fuel cylinders should be emptied by transferring their contents to another cylinder. If this is not possible the contents should be disposed of by burning. Avoid venting large amounts of propane into the atmosphere.

**Purging:** After the cylinders have been emptied they should be made gas-free by purging. The Cameron Balloons Maintenance Manual (section 4.4.8) describes purging using Nitrogen. Alternatively the contents gauges may be removed and the cylinders completely filled with water. After purging the cylinders may contain flammable liquids or oily residues that should be removed and disposed of in a suitable manner before the cylinders can be considered gas-free.

**Note:** Cameron Balloons Service Bulletin SB26 applies to Lindstrand T30 cylinders not affected by this bulletin.

**Handling, filling and transportation:** Lindstrand T30 cylinders do not comply with the requirements of ADR special provision 652.

***This Service Bulletin (at revision 3) is linked to EASA Airworthiness Directive 2018-0107***

# Service Bulletin 25



Compiled by: 	Notes:
Date: 06-June-18	Name: D.J. Cameron

## 11. Design Organisation Approval

### Statement of Compliance Verification

I hereby confirm that the instructions identified in this bulletin provide for practical and well defined installation/inspection methods and when accomplished the product is in conformance with approved design data.

Signed, for and on behalf of Cameron Balloons Ltd.

  
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Head of Airworthiness



Date: 06-June-2018	Name: D. C. Boxall
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### 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.

  
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Head of Design



Date: 06-June-2018	Name: D.C. Boxall
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Note: If this Service Bulletin is or will become an Airworthiness Directive, a statement to that effect must be entered in Section 10 of this form.