

# Service Instruction



## 1. General

(a) No.:	30
(b) Issue / Date	Issue 2 / 27-June-2023
(c) Title:	Installation of Transponder Equipment
(d) Description:	This Service Instruction provides methods and guidance for installing Transponder equipment in the basket.
(e) Applicability:	All
(f) Effectivity:	All

**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. Accomplishment Instructions

### 1. TRANSPONDER EQUIPMENT:

- i. Transponder equipment includes, but is not limited to the Transponder assembly, battery, GPS receiver, GPS antenna, transponder antenna, and associated wiring.
- ii. The Transponder, battery, and other equipment should be mounted in a robust enclosure to protect the assembly and to allow easy installation (see section 2). Antennae may be mounted separately.
- iii. The transponder equipment should be mounted in the basket in accordance with Service Instruction 23 - Installation of Basket Ancillary Equipment and Storage.

### 2. Transponder requirements:

- i. Installation of Transponder equipment into their enclosure is to be carried out using the Installation Manual of the applicable Transponder Manufacturer. All models and options within the scope of the installation manual are permitted and are considered Acceptable Technical Data. In the absence of Balloon OEM instructions, wiring practices documented in FAA AC43-13-1B Chapter 11 are to be used. If Lithium batteries are used the requirements of EASA CS-SC034c must be followed.
- ii. Unless mounted on the burner heat shield, Antennae not requiring a ground plane are preferred (e.g. Procom FLX 900/1090, Funke ANTGS-TRT, or Funke SP1090-4). Antennae should not be hung below the basket.
- iii. Mode S Transponders require programming of the aircraft Mode S address. Tests must be carried out to confirm correct address transmission. Changes to the aircraft address may not be released to service by the pilot owner.

- iv. The Balloon Registration must be placarded on the Transponder enclosure to match the programmed registration.
- v. Testing of Transponders to be in accordance with the Transponder Manufacturer's Instructions for Continued Airworthiness and the rules and regulations of the state of registration.

**3. APPLICABLE MANUFACTURERS:**

Suitable manufacturers for balloon include, but are not limited to:

- i. Trig
- ii. Funke
- iii. Becker
- iv. TQ Avionics
- v. Garmin

**4. RELEASE TO SERVICE:**

- i. The assembly of the transponder, battery, and associated equipment into its enclosure is not suitable for the release to service of the aircraft by the pilot-owner.
- ii. The assembled unit is considered non-installed equipment and may be inserted into and removed from the basket by the pilot.

**3. Materials As Required**

**4. Other Publications Affected** None

**5. Remarks** None

Compiled by:



Notes:

None

Date: 27-06-23

Name: S Cocker

**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 UK.21J.0140

Signed, for and on behalf of Cameron Balloons Ltd.



pp Head of Design



Company Stamp

Date: 27-06-23

Name: D Boxall