

## Standard Change CS-SC403b

### PROVISIONS FOR THE INSTALLATION OF LIGHTWEIGHT CAMERAS

#### 1. Purpose

The purpose of this SC is to specify the structural provisions for the installation of internally or externally mounted lightweight cameras on aircraft. The mounted camera needs to be self-contained, with internal batteries, and no external wiring.

*Note:* This SC does not apply to handheld carry-on cameras, nor to devices worn by the pilot, e.g. helmet-mounted cameras.

#### 2. Applicability/Eligibility

Any ELA2 aircraft.

#### 3. Acceptable methods, techniques, and practices

For the purposes of this SC, the following definitions apply:

- 'installer' means the person that releases the aircraft to service (and that carries out this SC) in accordance with AMC M.A.801 or AMC1 ML.A.801, as applicable;
- 'user' means the pilot who attaches the camera to the aircraft in accordance with the data established and released by the Installer.

The following standard applies:

- CAA UK CAP1369<sup>37</sup>, *Camera Mounts Guide*, Appendix A, except for the maximum mass limit. The referenced light aircraft engineer (LAE) is to be substituted by the person that releases the aircraft to service in accordance with AMC M.A.801 or AMC1 ML.A.801, as applicable.

Additionally, the following considerations apply:

- As part of applying this SC, the installer shall:
  - define and record the locations where a camera can be installed on the individual aircraft;
  - list the acceptable and tested camera mountings, identifiable by a part number or similar.
- For cameras mounted inside the aircraft and behind the occupants, a pull test in the direction of flight for the primary mounting and the secondary retention shall be performed using at least 15 times the weight of the unit.
- In the particular case of balloons and rotorcraft, pull tests are to be performed:
  - on all positions where the camera can be installed,
  - in all possible landing directions, including vertically downwards (-z).
- No items with sharp edges shall be installed in the proximity of the head of any occupant.

<sup>37</sup> The document is available at <http://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=7204>.

#### 4. Limitations

- The maximum mass of the camera, including mountings, shall not exceed 300 g.
- The maximum number of cameras installed on each wing and the empennage: 1 each.

#### 5. Manuals

The installer shall amend the AFM by an AFMS, which indicates:

- the dedicated locations where cameras can be attached;
- which combinations of mountings and cameras (identified by part numbers) are suitable at each location;
- how the mounting is to be attached;
- that GSM, UMTS, LTE, or similar transmission technologies with unknown or more than 100 mW output power shall be switched off during flight.

Based on the AFMS, cameras and their mounting systems can be attached by the user for the individual flight.

Amend the ICAs to establish maintenance actions/inspections and intervals, as outlined by CAA UK CAP1369, unless the AFMS limits the duration of the camera mount attached to less than 24 hours.

A placard must be installed visible to the pilot to caution them about the potential effects that the installed camera might have on flight characteristics and performance.

#### 6. Release to service

This SC is not suitable for the release to service of the aircraft by the pilot-owner.

**Note:** Attaching the camera to the aircraft in accordance with the AFMS is not considered as maintenance according to Part-M and does not require a release to service, as the AFMS contains detailed instructions how to attach the camera and its mounting system.

[Issue: STAN/2]

[Issue: STAN/4]