

## Standard Change CS-SC085a

### EXCHANGE OF AN AIRCRAFT LIVERY PAINT AND DECORATIVE STICKER SCHEME

#### Purpose

This SC is for a full or partial exchange of the design of the external livery of an aircraft.

#### 1. Applicability/Eligibility

This SC applies to aeroplanes and to rotorcraft that are not complex motor-powered aircraft, and to any ELA2 aircraft.

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

- (a) Paint/sticker materials to be used: by default, only materials (e.g. primer, filler, top coat, gelcoat, decorative adhesive sticker, etc.) that have been approved to be used on a given aircraft through the existing applicable maintenance data (e.g. the AMM, supplemental maintenance manual, or any other ICAs that are applicable to the aircraft) shall be used.

If some or all of the materials listed in the existing ICAs are either no longer available (obsolete) or not compliant with the applicable environmental protection requirements, then the following two options apply:

- the use of alternate materials shall be approved in accordance with Part 21, or
- materials may be used if they have been declared by the materials' manufacturer(s) to be equivalent to the materials listed in the existing ICAs.

- (b) Application processes for paint/sticker materials: any application processes/techniques that were approved by the TC/STC holder through the applicable maintenance data (e.g. the AMM, the SMM, or the equivalent ICAs) shall be followed.

Otherwise, the application processes/techniques that were documented and published by the manufacturer of the materials shall be followed.

In any case, the aircraft pre-painting preparation tasks and the final checks (bounding, balance, etc.), if any, that were defined by the TC/STC holder shall be followed.

*Note:* Particular attention must be paid to not cover static ports, fuel vents, drainage and similar openings.

- (c) Design of the external livery: when defining the design of the external livery, the following must be considered:

- (1) Markings: each emergency exit and external door (if any) in the passenger compartment must be externally marked and readily identifiable from outside the aeroplane by:

- a conspicuous visual identification scheme; and
- a permanent decal or placard on or adjacent to the emergency exit that shows the means of opening the emergency exit, including any special instructions, if applicable. Each placard and operating control for each emergency exit must be red in colour.

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- (2) Fuel filler openings must be marked at or near the filler cover with:
- for reciprocating engine-powered aircraft:
    - the word that identifies the correct type of fuel, e.g. 'Avgas', 'MOGAS', 'Diesel', 'Jet Fuel', as applicable; and
    - the minimum fuel grade;
  - for turbine engine-powered aircraft:
    - the word that identifies the correct type of fuel, e.g. 'Jet Fuel', as applicable; and
    - the permissible fuel designations, or references to the AFM for permissible fuel designations;
  - for pressure fuelling systems, the maximum permissible fuelling supply pressure and the maximum permissible defuelling pressure.
- (3) Oil filler openings must be marked at or near the filler cover with:
- the word 'Oil'; and
  - the permissible oil designation, or references to the AFM for permissible oil designations.
- (4) Coolant filler openings must be marked at or near the filler cover with the word 'Coolant'.
- (5) The system voltage of each direct current installation (if any) must be clearly marked adjacent to its external power connection.
- (6) Every external marking/placard (including the aircraft registration marks) must have a colour contrast that is readily distinguishable from the surrounding surface.
- (7) After the painting or application of decorative stickers, every placard that was originally installed as per the aircraft ICAs or AFM shall be reinstalled and verified for proper readability.
- (d) Slip-resistant surfaces
- (1) If any areas of the aircraft are already covered with slip-resistant material (e.g. the upper surface of the wing root), those areas must either remain untouched or identical areas of the slip-resistant material approved by the TC or STC holder can be reinstalled following the embodiment of the new paint scheme.
  - (2) Using this SC, the areas that are covered with slip-resistant material shall not be enlarged, and no such areas shall be added to an existing design. Any enlargement of, or addition to, the areas covered with slip-resistant material shall be approved in accordance with Part 21.
- (e) Weight and balance
- (1) Emphasis is directed to the effect of too many extra coats of paint on the general weight and balance of an aircraft, and more particularly regarding balanced control surfaces. Adding additional coats of paint in excess of what the TC or STC holder originally applied in accordance with existing applicable maintenance data must be avoided. Where available, the

TC or STC holder's instructions relative to the finishing and balance of control surfaces must be consulted and followed.

- (2) If the design change involves the painting of the complete aircraft (or extensive use of decorative stickers), then after the completion of the painting, the aircraft must be weighed in accordance with the TC holder's applicable maintenance data. The aircraft weight and balance report shall be updated accordingly.

### **3. Limitations**

Any limitations defined by the TC or STC holder apply.

If materials have been used that are not listed in the existing ICAs, any limitations defined by the manufacturers of the materials apply.

### **4. Manuals**

Amend the ICAs to include a clear and complete description of the external livery paint scheme. It is recommended that this description should take the form of a drawing that includes:

- the overall design, including the dimensions and details of any painted markings;
- the paint/decorative sticker reference(s) and colour(s); and
- the type, serial number and registration of the aircraft to which the drawing belongs.

#### *Notes:*

- If materials have been used that are not listed in the existing ICAs, proof from the manufacturer of the materials that the materials used are considered to be equivalent to the materials listed in the existing ICAs must be recorded as part of the aircraft records.
- If application processes/techniques have been used that are not documented in the applicable maintenance data (the AMM, the SMM, or the equivalent ICAs), the documented application processes/techniques of the manufacturer of the materials must be recorded as part of the aircraft records.

### **5. Release to service**

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

[Issue: STAN/3]