

## Standard Repair CS-SR802d

### REPAIR OF SAILPLANES, INCLUDING POWERED SAILPLANES, LSA AND VLA

#### 1. Purpose

This SR is issued to allow the use of established practices for the repair of metal, composite, wood, and mixed structures of light aircraft.

#### 2. Applicability/Eligibility

This SR is applicable to sailplanes, including powered sailplanes (as defined in ELA2), LSA and VLA.

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

All the structural parts identified in this SR are eligible for installation without an EASA Form 1.

Any of the following standards contain acceptable data:

for composite structures:

- 'Kleine Fiberglas Flugzeug Flickfibel' by Ursula Hänle<sup>38</sup>, or
- Seminardruck 'Faserverbundwerkstoffe im Segelflugzeugbau', Fortbildungsseminar des DAeC;

for wooden and mixed structures on sailplanes, including powered sailplanes:

- R.C. Stafford-Allen 'Standard Repairs to Gliders' by the British Gliding Association<sup>39</sup>, or
- 'Werkstattpraxis für den Bau von Gleit- und Segelflugzeugen' by Hans Jacobs;

for skin only:

- 'Manuel de Reparation Generale pour la Reparation Des Planeurs en Materiaux Composites R02-15-A01, indice B'<sup>40</sup>, issued by the Fédération Française de Vol à Voile (FFVV)<sup>41</sup>;

for general purposes:

- 'Grundlagen der Luftfahrzeugtechnik in Theorie und Praxis', Band II Verlag TÜV Rheinland GmbH, ISBN Nr.: 3-88585-001-X, or
- 'Grundlagen der Luftfahrzeugtechnik in Theorie und Praxis', Band V: Segelflugzeuge und Motorsegler, Verlag TÜV Rheinland GmbH, ISBN Nr.: 3-8249-0351-2.

The instructions and tests defined by the manufacturer of the repaired material have to be followed.

<sup>38</sup> Available at <http://www.dg-flugzeugbau.de/flickfibel-d.html>. Also available in English under the title 'Plastic Plane Patch Primer'.

<sup>39</sup> Available at <https://members.glding.co.uk/library/standard-repairs-to-gliders>.

<sup>40</sup> 'indice B' contains changes agreed with EASA; subsequent amendments shall be used only if referred to in CS-STAN.

<sup>41</sup> To retrieve the document, refer to <http://maintenance.navigabllite.ffvv.org/files/2017/03/manuel-de-reparation-generique-ffvv-ind-b-pour-cs-stan-easa-4.pdf>.

#### 4. Limitations

- The person responsible for the design of the repair must be familiar enough with the applicable airworthiness requirements to determine that the repair data developed from the references in point 3 above is appropriate for the product being repaired.
- Where suitable TC-holder-approved repair data exists, this should be used before a SR is considered.
- For bonded repairs, the SR should not exceed a size above which the limit load cannot be sustained should the repair fail, unless the person responsible for the repair is sufficiently experienced with the design data, materials, process, repair size, and aircraft configuration.

**Note:** Where there is any doubt as to whether following the references in point 3 will result in compliance with the applicable requirements, instead of applying this SR, a repair design approval in accordance with Part 21 should be obtained. Particular attention should be paid to repair designs where there is a risk of adversely affecting fatigue or aeroelastic characteristics, and the recommendations of the references should be followed.

#### 5. Manuals

Assess whether the repair could require the issue of an AFMS.

Amend the ICAs to establish maintenance actions/inspections and intervals, as required.

#### 6. Release to service

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

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