

SERVICE LETTER SL-00014

Date Released: August 26, 2020

Date Effective: August 26, 2020

Subject: RV-7/8/9 Tailcone Stiffener

Affected Models: RV-7, RV-8, and RV-9

Required Action: Although not required, it is recommended that a small diagonal stiffener be riveted to the interior of the tailcone skin, directly below the access panel under the horizontal stabilizer, one on each side of the airplane.

Level of Certification: EAB: Owner (certification not required)

Synopsis:

Data from the field suggest that it is possible for high loads on the tailwheel to permanently deform the tailcone skin, such as when a tailwheel hits a steep bump while making a tight turn on the ground. This deformation can be prevented by the addition of a small diagonal stiffener to help carry shear loads from the tailwheel to the bulkhead ahead of it.

Materials Required:

The following materials are required to complete the steps necessary to achieve compliance with this Service Letter:

- AN426AD3-3 rivets, ten (10) per airplane.
- Purchase Part no. F-00773A, two (2) per airplane.



FIGURE 1: RV-7 with deformed tailcone skin near access panel.

Method of Compliance:

Step 1: Identify rivets "A" through "D" as designated in Figure 2 (RV-7 and RV-9) or in Figure 3 (RV-8).

Mark two points on the external surface of the tailcone skin, at the locations specified in Figure 2 or 3. These will mark the locations for the end rivets on the F-00773A stiffener.

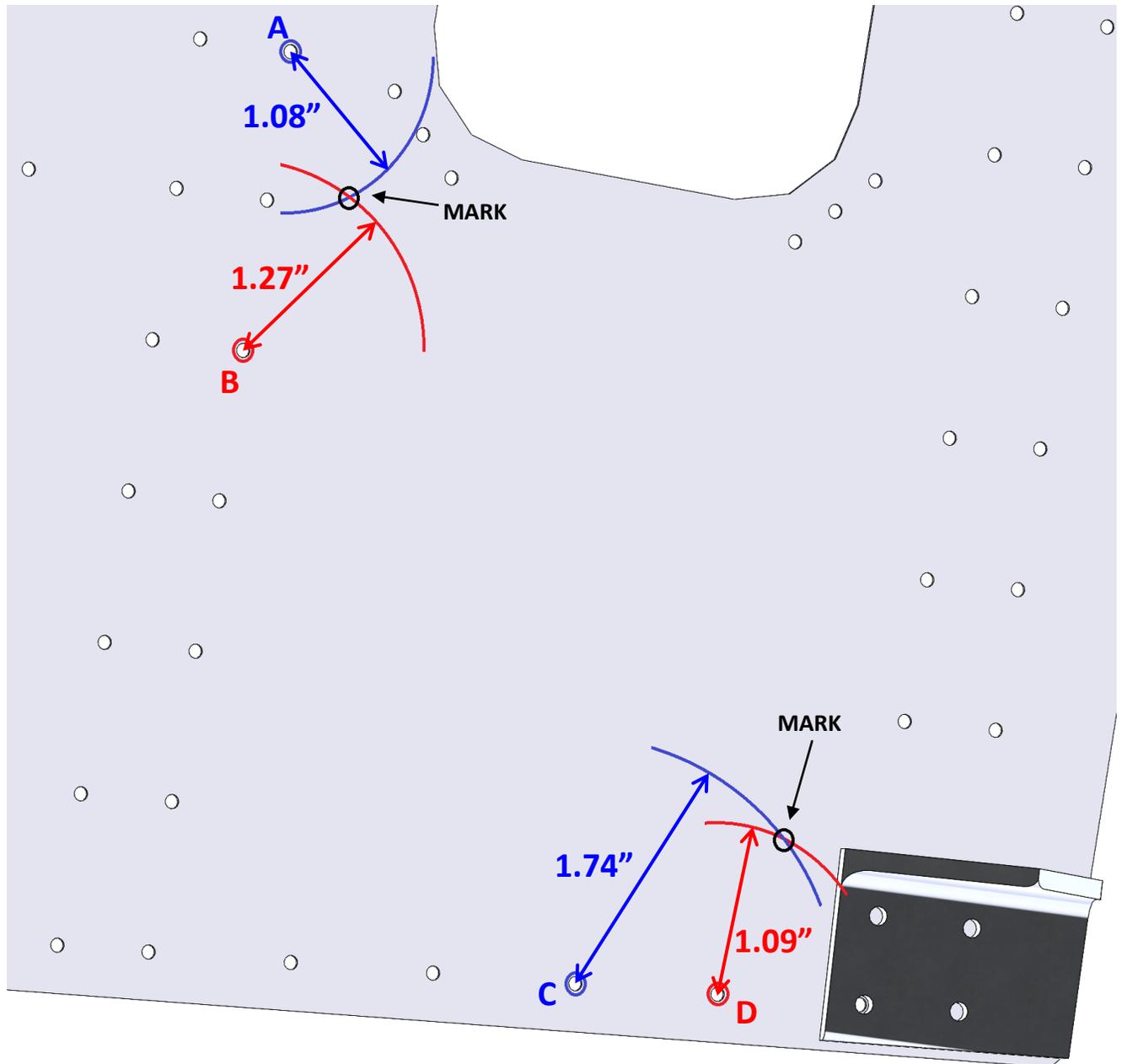


FIGURE 2: Locations for two end holes of F-00773A stiffener on the RV-7 and RV-9, left side.

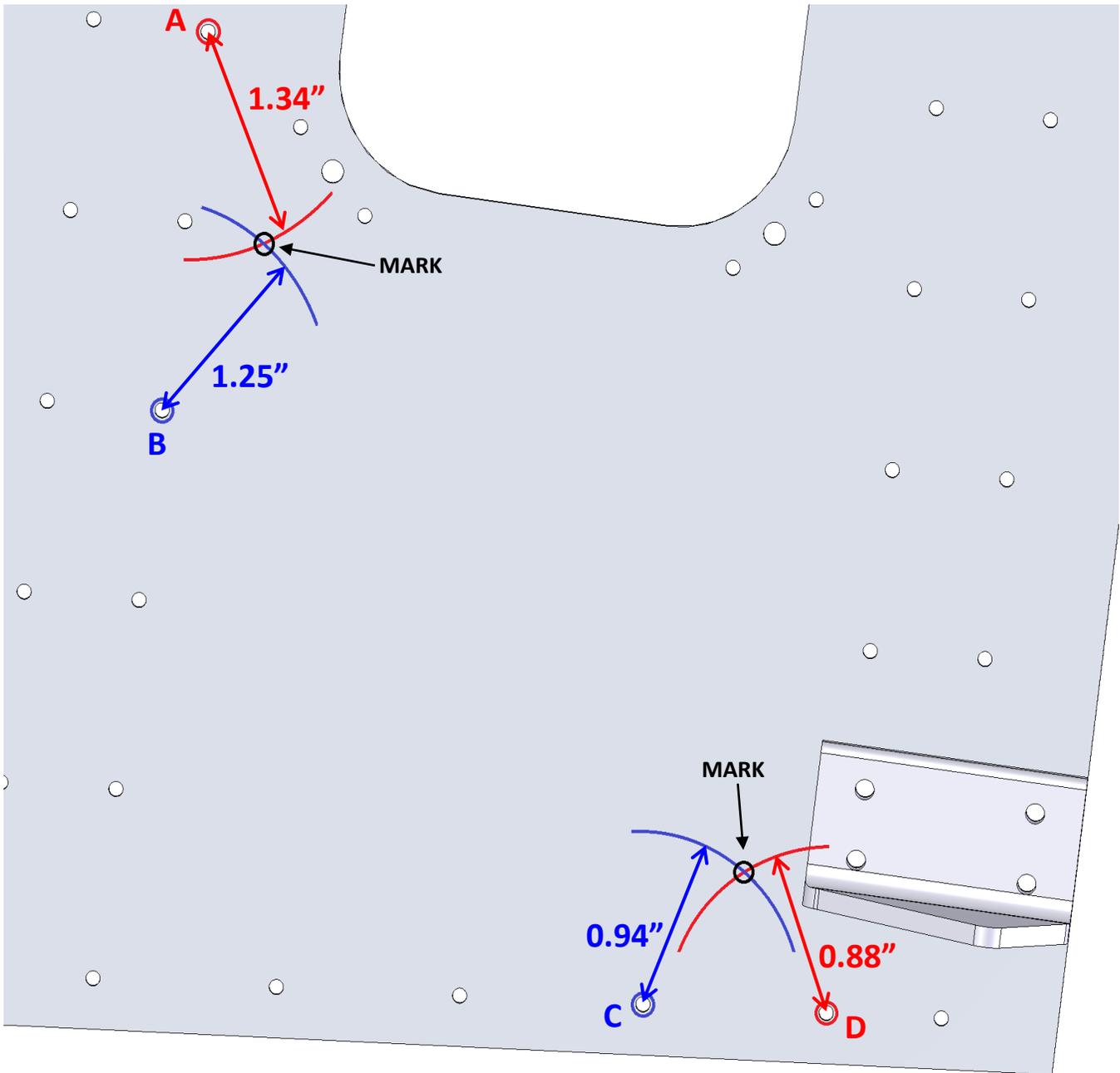


FIGURE 3: Locations for two end holes of F-00773A stiffener on the RV-8, left side.

Step 2: Drill #40 one of the two locations marked in Step 1.

Cleco the stiffener to the outside of the skin using this hole.

Verify that the hole on the opposite end of the stiffener lines up with the other location marked on the skin in Step 1.

Step 3: Drill #40 the remaining holes. Use the stiffener as a pattern.

Step 4: Cleco the stiffener to the inside of the skin to check for interference with nearby structure such as bulkhead flanges, J-stringers, and the access panel joggle.

Trim the ends of the stiffener as required to eliminate any interference.

See Figure 4 for reference.

Step 5: Deburr and dimple the holes.

Step 6: Rivet the stiffener to the inside of the skin. AN426AD3-3 rivets are recommended.

Step 7: Repeat for the other side of the fuselage.

Step 8: Make a logbook entry indicating compliance with this Service Letter.

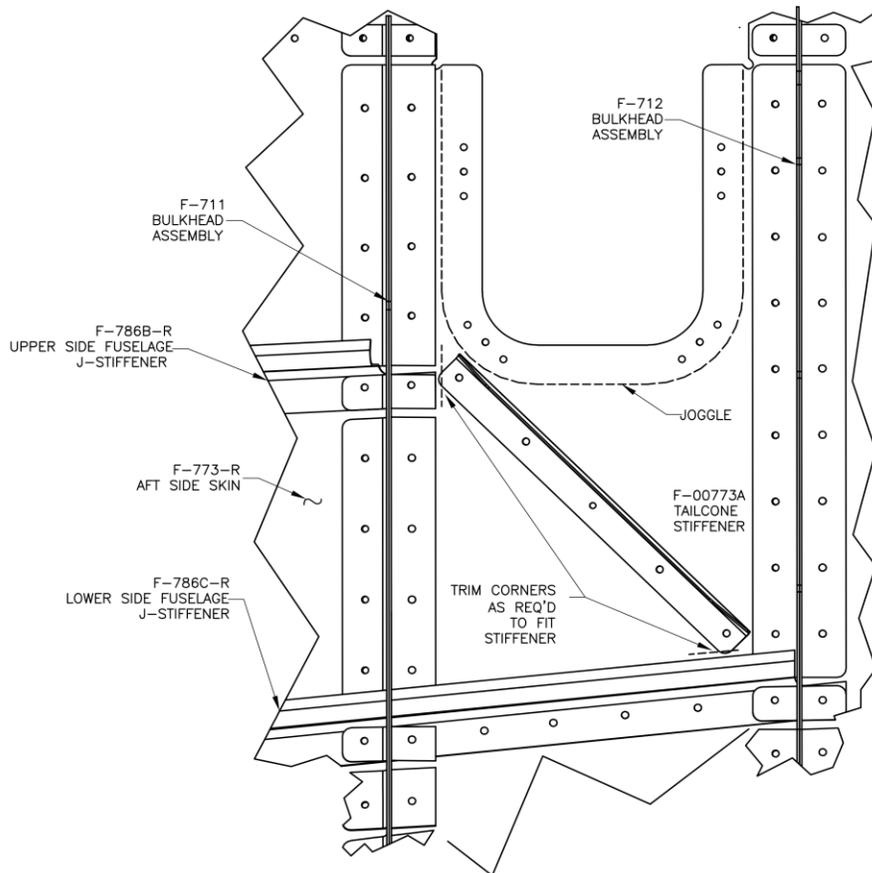


FIGURE 4: Excerpt from RV-7 and RV-9 drawing 27. RV-8 drawing 73 is similar.