SUBJECT: 269D1120 Main Rotor Blade Paint Separation

MODELS AFFECTED: Model 269D Configuration "A" Helicopter (S-333)

REFERENCE: CSP-D-9, Basic Handbook of Maintenance Instructions (HMI), Reissued 20 Jul 2001, Revised 20 Aug 2010

During main rotor blade manufacturing, the doubler is bonded to the blade skin. The bonding process may leave a small ridge or "shelf" of dried adhesive along the interface of the doubler and skin (see Figure 1). When the blade is painted this adhesive shelf may give a false appearance of the paint having separated from the blade.

This service bulletin provides instructions to perform a field inspection for paint separation, a field repair, and a touch up procedure to the blade finish as necessary.

Schweizer Aircraft recommends this field inspection and repair procedure (if necessary) be performed at the next inspection with blades removed.

Field Inspection:

1. Clean interface of doubler and skin with clean cloth dampened with dry cleaning (Stoddard) solvent (HMI, Section 2, Table 2-2, Item 42).

2. Visually inspect for the following conditions:

   a. Foreign material along line of separation.

   b. Noticeable cracking parallel or perpendicular to doubler outer mold line (OML).

   c. A 0.003 thickness stainless steel feeler gage placed along surface of blade skin deeper than 0.010-inches under line of separation.

d. Any separation perpendicular to doubler OML.

3. If any of the conditions in step 2. (above) exist, remove blade from service and return to OEM.

4. If none of the conditions in step 2. (above) exist, continue:

   a. Using 10X magnifying glass and an LED flashlight or fiber optic light source, visually inspect for evidence of paint separation on the doubler OML. Separation should resemble areas of “bridging” and “separation.

   b. If this is the extent of separation, blade may be repaired. Refer to Field Repair section in this Service Bulletin.

Field Repair:

1. Wash area in accordance with HMI. Remove all sand, dust, dirt and debris.

2. Lightly sand area with 200 grit abrasive paper (HMI, Section 2, Table 2-2, Item 28) to roughen surface.

   a. If sanding process reveals bare metal:

      i. Alodine in accordance with SHP 4-67 or HMI (Publication No. CSP-D-9).

      ii. Prime in accordance with HMI (Publication No. CSP-D-9).

3. Re-wash sanded area in accordance with HMI. Remove all sanding dust and debris.

4. Wipe surface dry using clean cloth dampened with dry cleaning (Stoddard) solvent (HMI, Section 2, Table 2-2, Item 42). Allow surface to flash for at least one hour before proceeding.

5. Apply a small bead of EA934 sealant (HMI, Section 2, Table 2-2, Item 134) or EA960 bonding resin (HMI, Section 2, Table 2-2, Item 74) along entire doubler OML. Follow manufacturer’s instructions for application and curing.

6. Lightly sand dried sealant or bonding resin to smooth out fillet between doubler and blade skin.

7. Wipe area with clean cloth dampened with dry cleaning (Stoddard) solvent (HMI, Section 2, Table 2-2, Item 42) to remove all debris.

8. Touch up paint in accordance with HMI (Publication No. CSP-D-9).

9. Make an appropriate logbook entry to show compliance with this service bulletin.

10. Return blade to service.

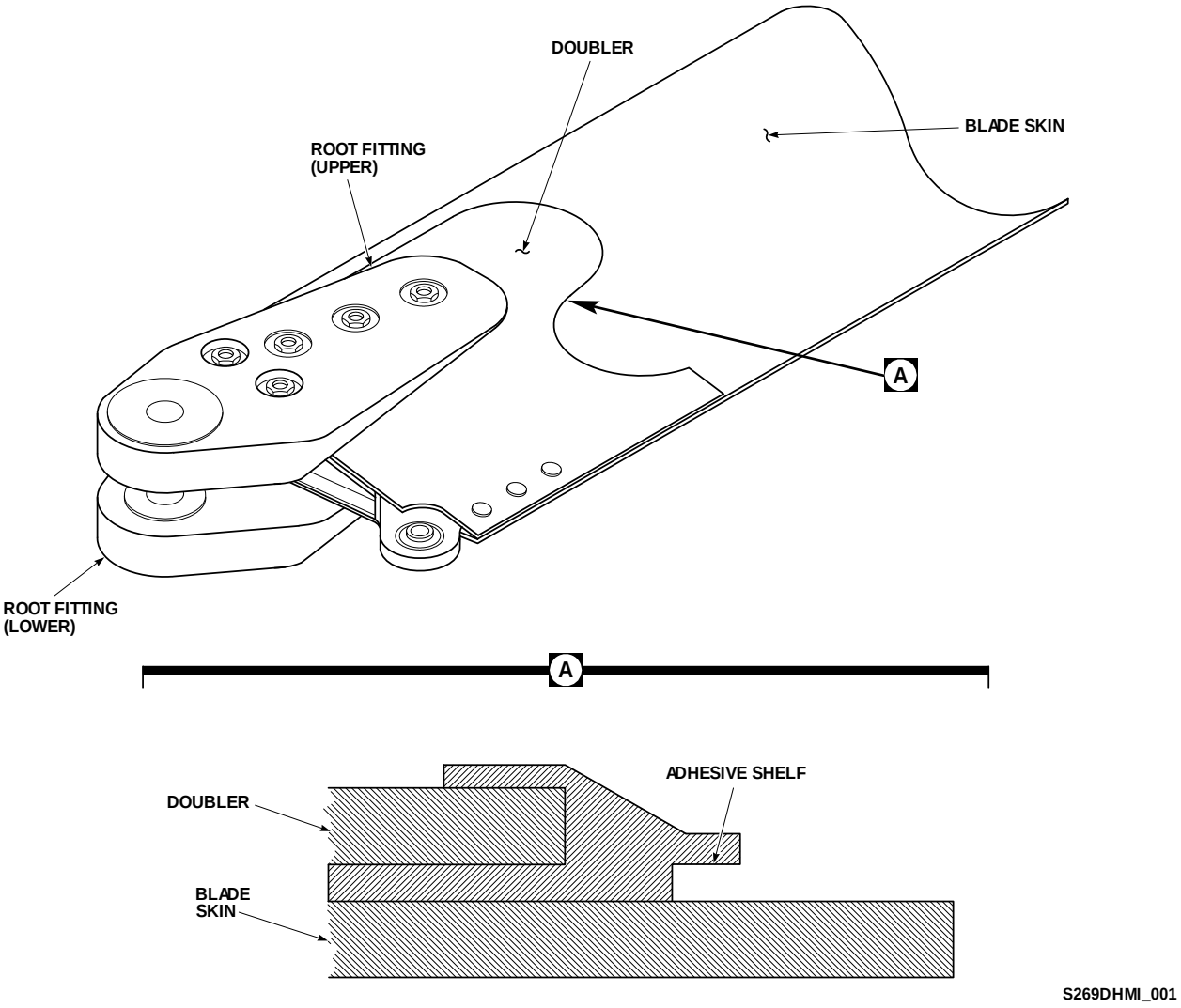

Figure 1. Adhesive Shelf at Interface of Doubler and Blade Skin