



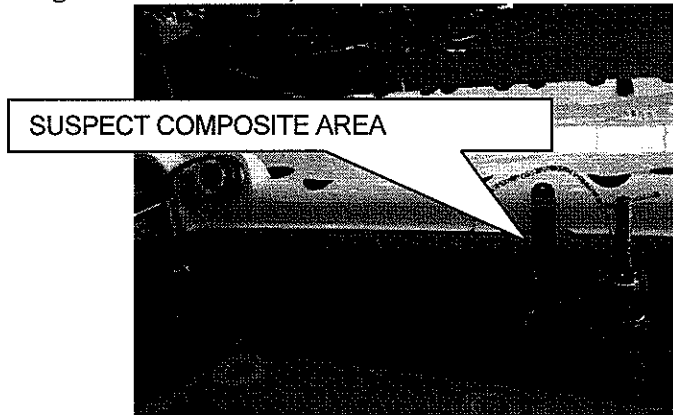
Engineering Letter

Date: November 2, 2009
Doc. No.: EL 2009-005A

From: Simplex Mfg.

To: Santoku Aviation Electric, Inc.

Subject: Composite inspection and repair procedures for the Simplex model 301 hard point area as identified by Santoku Aviation (see image below for reference):



- Purpose:** The purpose of this letter is to define the inspections procedures under the suspect composite area of the Simplex model 301 tank shell.
- Compliance with ICA:** The FAA approved Instructions for Continued Airworthiness requires the customer to contact Simplex if a suspect crack is within two (2) inches of any attach point.
- Inspection**
1. Remove hard point assembly over the suspect composite area (retain all hardware for re-installation).
 2. Carefully chip off cracked gel coat outer finish to expose raw composite under suspect area.
 3. Visually inspect for cracks, voids or delaminations. Take photos of inside and outside of the damaged tank areas.
 4. Perform "coin tap" testing around suspect area checking for cracks, voids or delaminations. A crisp sound response from the coin tap indicates no damage to composite. A dull thump sound response from the coin tap may indicate voids or delaminations.
 5. Repeat step 3 inspection procedures on the inside of the tank at the suspect composite area.
- Repair Instructions:**
1. If the inspection determines the composite is NOT damaged use Simplex process specification SMC2006-001 gel coat repair procedures to repair the cosmetic damage to the gel coat.
 2. If the inspection determines there are voids or delaminations send pictures of the outside and inside of the damaged tank area to Simplex for review. Simplex will determine the appropriate actions once the pictures are reviewed.

Approved by:

Tim Pyle
Sustaining Engineering and QA Manager
Simplex Mfg.