ATTACHMENT 29

AIRWORTHINESS GROUP CHAIRMAN'S FACTUAL REPORT

LAX-02-GA-201

4-195. INSPECTION CW 30, CENTER WING LOWER SURFACE PANELS UNDER DOUBLERS CWS 61.5 TO 80 L/R. (See figure 4-30.)

4-196. DESCRIPTION. The center wing lower surface panels are machined extrusions fabricated from 7075-T6 aluminum alloy. The lower wing panels are anodized and coated with various coating systems. Doublers are installed at various locations on the lower surface between CWS 61.5 and 80.

4-197. DEFECTS. Cracks initiate in the wing panel from fastener holes under the doublers and progress from stop drilled cracks in the wing where repair doublers have been installed.

4-198. PRIMARY NDI PROCEDURE - RADIOGRAPHY.

WARNING

RADIATION HAZARD

Ensure compliance with all applicable safety precautions set forth in Section I, of this manual, and TO 33B-1-1. Failure to comply may result in serious injury to personnel.

a. NDI Equipment.

(1) Portable X-ray Unit, NSN 6635-00-000-0133, or equivalent.

(2) Film Type M, or equivalent.

b. Preparation of airplane.

WARNING

Make sure power is isolated from all systems in the inspection area prior to approaching the inspection area. Failure to comply may result in serious injury to personnel.

(1) Isolate power from all systems in the inspection area in accordance with TO 1C-130A-2-1 and TO 1C-130A-2-2.

(2) Remove wing to fuselage fairings No. 172 and 173 from under wing.

c. Access. Access is gained to the top and bottom of the wing with use of appropriate SE and removal of fairings.

d. Preparation of part. No special preparation required.

e. X-ray machine settings. Set the X-ray machine for the data indicated in the radiographic inspection data block. This procedure is for a median film density of 2.0.

NOTE

Settings specified in this procedure were established to provide and assure quality radiographic and film densities specified in this procedure. Due to variance in X-ray equipment it may be necessary to vary the MA, time, and KV settings in order to achieve the density specified and quality necessary. Therefore, the MA and time settings should be construed as guidelines and KV may be lowered if necessary (not raised); however, the density specified must be maintained.

f. Film placement. Place X-ray film, as illustrated, and in the sequence specified. After each exposure, remove film and place film for next exposure. Use film specified in radiographic inspection data block or equivalent.

g. X-ray tube location. Locate X-ray tube and center X-ray beam, as illustrated, for each exposure.

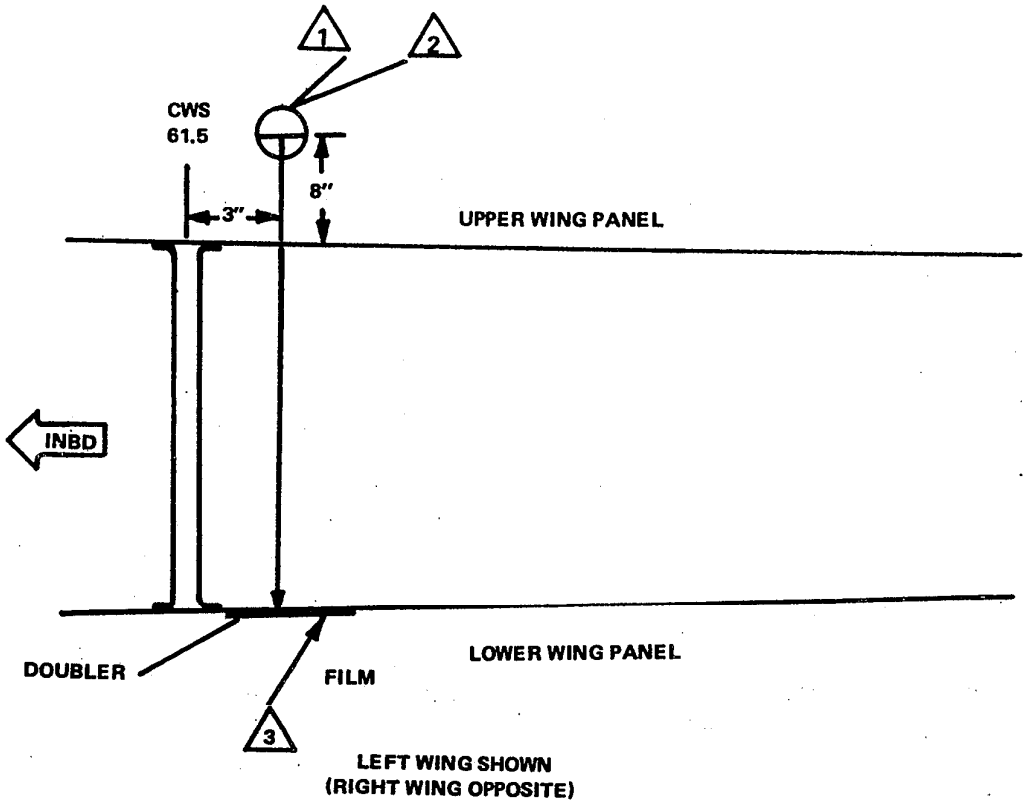
h. Inspection. Make radiographs of the inspection area in accordance with radiographic inspection data, as illustrated.

i. Mark indicated defects.

j. Defects noted in primary procedure will be confirmed by removing the repair doubler and performing an eddy current inspection of the area.

k. Mark and report indicated defects.

4-199. SYSTEM SECURING. Clean areas inspected, restore finishes, reinstall removed components and perform operational checkouts, as required, in accordance with applicable technical orders.



NOTE

1. DISTANCE OF X-RAY TUBE HEAD FROM CWS 61.5 MAY VARY DEPENDING ON DOUBLER LOCATION AND SIZE. MINIMUM DISTANCE IS 3" OUTBOARD OF CWS 61.5.
2. POSITION X-RAY TUBE SO THAT X-RAY BEAM WILL BE CENTERED AND PERPENDICULAR TO DOUBLER.
3. PLACE FILM ON BOTTOM SURFACE CENTERED OVER DOUBLER.

EXPOSURE NUMBER	FILM IDENTIFICATION	SUBJECT	KV	MA	FILM AIMING DISTANCE	TIME (SEC)	FILM TYPE	FILM SIZE
NUMBER EACH DOUBLER	IDENTIFY DOUBLERS BY WING PANEL	DOUBLERS BETWEEN CWS 61.5 - 80	120	4	8" FROM TOP OF WING	75 Sec	M	14 X 17

Figure 4-30. Inspection of Center Wing Lower Doublers Between CWS 61.5 and 80.0, L/R