ATTACHMENT 27

AIRWORTHINESS GROUP CHAIRMAN'S FACTUAL REPORT

LAX-02-GA-201

4-77. ACCEPTANCE/REJECTION CRITERIA.

a. Any cracks exceeding repair limitations contained in TO 1C-130A-3 require prime ALC disposition.

b. Repair cracks per TO 1C-130A-3.

4-78. RESTORATION OF AIRCRAFT AFTER INSPECTION:

a. Restore all finishes removed for this inspection.

b. Replace all access doors previously removed.

4-79. INSPECTION CW 11, ALL SKIN PANEL SEAMS, UPPER AND LOWER, CWS 220 LEFT TO CWS 220 RIGHT. (See figure 4-12.)

4-80. INSPECTION EQUIPMENT.

EQUIPMENT OR MATERIAL	MODEL OR TYPE	MANUFACTURER	VENDOR CODE
INSPECTION MIRROR	-	-	-
FLASHLIGHT	-	-	-
Penetrant Inspection Kit, Fluorescent	Type I, Method C, Group VII, MIL-I-25135	Refer to Section II Table 2-1	37676

4-81. AIRPLANE PREPARATION PRIOR TO INSPECTION.

a. Refer to Safety Precautions, Section I of this manual and TO 33B-1-1 for precautions to be observed during non-destructive inspection of airplane.

b. Gain access to interior of center wing through available access ports.

c. Clean inspection areas as required to obtain a good visual inspection.

4-82. INSPECTION.

a. Visually inspect, using mirror and flashlight as necessary, upper and lower center wing surface skin and stringers from outside and inside for cracks originating at fastener holes common to the skin and stringers and fastener holes common to skin panel mating seams. Look for evidence of corrosion as well as cracks. See figure 4-12 for typical inspection area and defects to be looked for.

b. Marl all suspected areas for confirmatory inspection.

4-83. BACK-UP OR CONFIRMATORY INSPECTION.

a. Perform back-up inspection using fluorescent penetrant. Strip paint in localized area around suspected defect. Use Type I, Group VII, Method C fluorescent penetrant procedures in accordance with TO 33B-1-1 and Section II of this manual. Minimum penetrant dwell time shall be 30 minutes.

b. Mark defects confirmed by penetrant method and record per TO 00-20-5.

4-84. DESCRIPTION OF DEFECTS. The defects looked for in this inspection are fatigue cracks emanating from fastener holes in skin and stringers and panel mating areas. These cracks are attributed to ground and flight loads. Also, corrosion in these areas is to be looked for.

4-85. ACCEPTANCE/REJECTION CRITERIA.

a. Any cracks or corrosion exceeding repair limitations contained in TO 1C-130A-3 require prime ALC disposition.

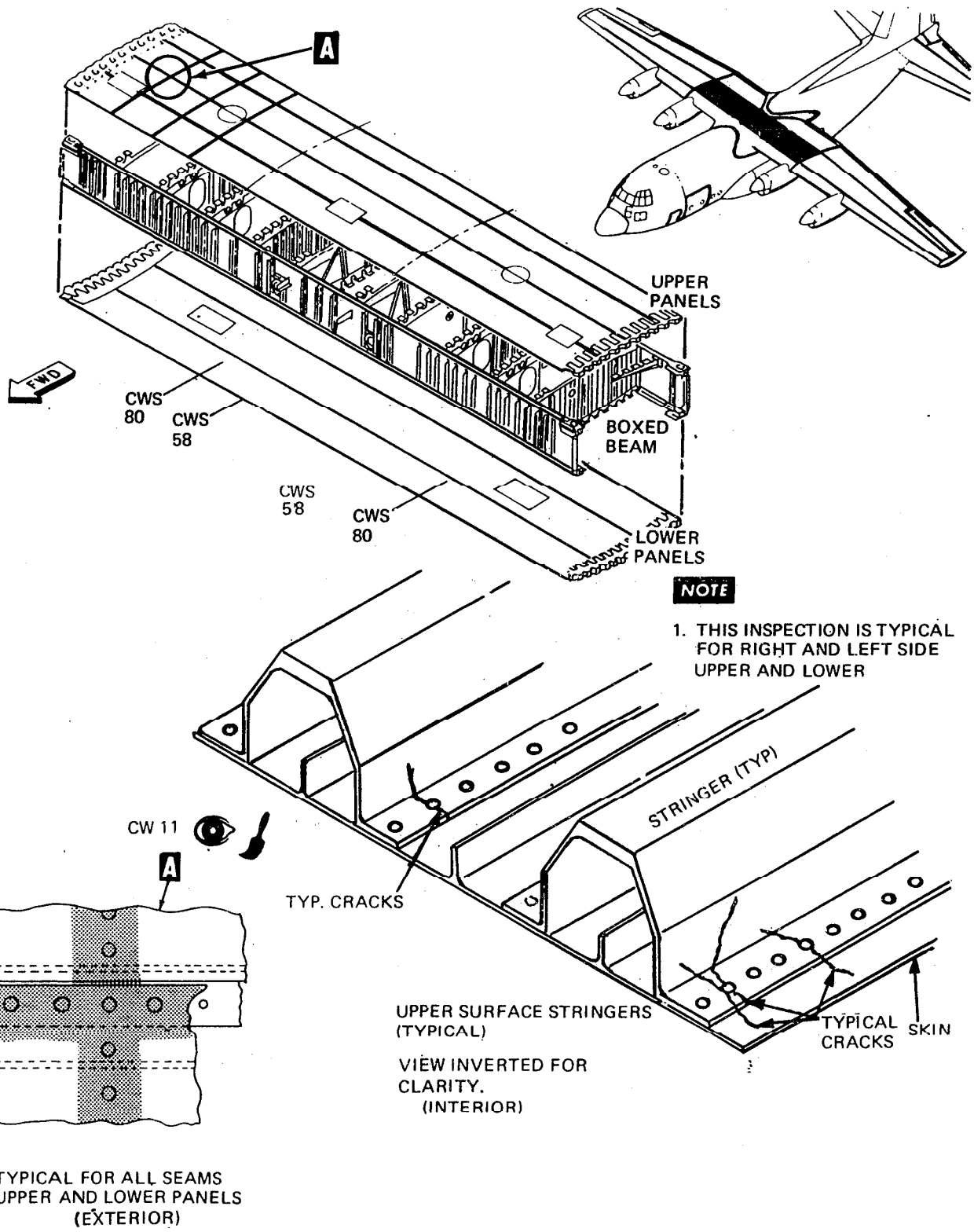

Figure 4-12. Inspection of Panel Seams

b. Repair cracks or grind-out corrosion per TO 1C-130A-3.

4-86. RESTORATION OF AIRCRAFT AFTER INSPECTION. Replace finishes, clean inspection area and replace access covers as required.

4-87. INSPECTION CW 12 - UPPER WING SURFACE SKIN IN THE AREA OF THE RAINBOW FITTING, CWS 214-220, LEFT AND RIGHT. (See figure 4-13.)

4-88. INSPECTION EQUIPMENT.

EQUIPMENT OR MATERIAL	MODEL OR TYPE	MANUFACTURER	VENDOR CODE
Eddy Current Inspection Unit	*ED-520	Magnaflux Corp	37676
Probe, General Purpose Surface 1/8 inch Diameter	*P/N 201218 or 6100-1/8	Magnaflux Corp Ideal Specialities	37676 23910
*OR EQUIPMENT			

4-89. AIRPLANE PREPARATION PRIOR TO INSPECTION.

a. Refer to Safety Precaution, Section I, of this manual and TO 33B-1-1, for precautions to be observed during non-destructive inspection of the airplane.

b. No removal or access problems are encountered with this inspection.

c. Paint removal is not required if fastener edges can be defined and paint is not chipped.

4-90. INSPECTION PROCEDURE.

a. Calibration. Refer to Section II of this manual for calibration procedure of ED-520 instrument with surface probe.

b. Inspection:

(1) With instrument balanced, set meter at approximately 350 meter units.

(2) Scan around all fasteners attaching the skin to the rainbow fitting as illustrated in figure 4-13.

NOTE

Scan as close to fastener as possible without getting so close that edge effect from fastener affects the meter indications.

(3) Mark all indications of cracks, meter deflections of 100 meter units or greater, for confirmatory or back-up inspection.

4-91. BACK-UP INSPECTION.

a. Perform back-up inspection using fluorescent penetrant when indication is found by eddy current. Strip paint in localized area on skin. Use Type I, Group VII, Method C fluorescent penetrant procedures in accordance with TO 33B-1-1 and Section II of this manual.

b. Mark defects as necessary and record per TO 00-20-5.

4-92. DESCRIPTION OF DEFECT. Defects looked for in this inspection are fatigue cracks propagating from fastener holes due to ground and flight loads. Generally the cracks are expected to run fore and aft across the wing surface.

4-93. ACCEPTANCE/REJECTION CRITERIA.

a. Any cracks exceeding repair limitations contained in TO 1C-130A-3 require prime ALC disposition.