

Structural Inspection Requirements

6-1 Structural Inspection Requirements

Note

All areas opened for inspection shall be cleaned prior to inspection. All aircraft disassembly, cleaning, resealing and refinishing of access panel defective surfaces is considered basic to this TRD (interior and exterior surfaces). Limit inspection to the extent of required disassembly.

The following are the structural inspection requirements of this TRD. Zonal inspection requirements, if previously accomplished, (accomplished during zonal inspections listed in section 5 of this TRD) limit inspection to specific inspection listed. Each structural requirement item shall be inspected using the NDI techniques specified. All disassembly, paint, sealant removal and refinishing required to perform the structural requirements (including NDI requirements) are considered basic to this TRD. This section contains structural inspection requirements. Illustration, forms and detailed instructions are contained in the SSP/SSI Access database published and maintained by P-3 FST (IMC/PDM Team). All inspection results shall be documented on this SSP/SSI database in Access 97 format (see Section 8 of this TRD).

6-1.1 Horizontal Stabilizer, Upper Surface Planks - SSI-E2

Requirement - Inspect zone 15.4. Provide a detailed inspection of the fairing internals. Horizontal stabilizer upper forward, center and aft planks. Ultrasonically inspect each row of span wise and chord wise fastener holes, covering a minimum of 0.5 inch radius around each fastener.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Horizontal stabilizer fasteners have been resealed.
- Discrepancies approved by the AGR have been corrected.

6-1.2 Horizontal Stabilizer Upper Surface Planks - SSI-E5

Requirement - Inspect zone 15.7. Provide a detailed inspection of the fairing internals. Horizontal stabilizers upper forward, center and aft planks. Ultrasonically inspect each row of span wise fastener holes, covering a minimum of 0.5 inch radius around each fastener.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Horizontal stabilizer fasteners have been resealed.
- Discrepancies approved by the AGR have been corrected.

6-1.3 Horizontal Stabilizer Lower Surface Planks - SSI-E3

Requirement - Inspect zone 15.4. Horizontal stabilizer lower forward, center and aft planks. Ultrasonically inspect each row of span wise and chord wise fastener holes, covering a minimum of 0.5 inch radius around each fastener.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.
- Horizontal stabilizer fasteners have been resealed.

6-1.4 Horizontal Stabilizer Lower Surface Planks - SSI-E6

Requirement - Inspect zone 15.7. Horizontal stabilizers lower forward, center and aft planks. Ultrasonically inspect each row of span wise and chord wise fastener holes, covering a minimum of 0.5 inch radius around each fastener.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.
- Horizontal stabilizer fasteners have been resealed.

6-1.5 Wing Plank Joints - SSI-F26

Requirement - Inspect zone 16.3. Left wing plank joint, planks 1 through 9, lower surface. (b) (7)(E) Using eddy current, inspect the centroid cavity radii.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.6 Wing Plank Joints - SSI-F27

Requirement - Inspect zone 16.4. Right wing plank joint, planks 1 through 9, lower surface. (b) (7)(E) Using eddy current, inspect the centroid cavity radii.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.7 Forward Main Ring Fitting - SSI-F31

Requirement - Inspect zone 16.3. Forward main ring fitting. (b) (7)(E) Using fluorescent penetrator, inspect the four inch square area from the lower outboard corner of the fitting, and the 5/8 inch diameter hole. Ultrasonically inspect the entire 10 inch span of the lower flange except for transition areas, and the area of the vertical flange encompassed by the 5/16 inch diameter fasteners located directly above the 5/8 hole and the 1/4 inch diameter holes.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.8 Forward Main Ring Fitting - SSI-F32

Requirement - Inspect zone 16.4. Forward main ring fitting. (b) (7)(E) : Using fluorescent penetrator, inspect the four-inch square area from the lower outboard corner of the fitting, and the 5/8 inch diameter hole. Ultrasonically inspect the entire 10 inch span of the lower flange except for transition areas, and the area of the vertical flange encompassed by the 5/16 inch diameter fasteners located directly above the 5/8 hole and the 1/4 inch diameter holes.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.

- Discrepancies approved by the AGR have been corrected.

6-1.9 Center Section Wing Planks - SSI-F25

Requirement - Inspect zone 16.1. Inspect for defects. Wing center section lower surface planks, external, (b) (7)(E). Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect plank splices, except those areas inaccessible due to permanent structure.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.10 Aft Spar Cap - SSI-W9

Requirement - The depot activity shall inspect upper aft left spar cap radius along entire wingspan from (b) (7)(E) using eddy current NDI technique. To ensure inspection results are not affected by paint/sealant accumulations, the spar cap radius shall be chemically stripped prior to inspection.

Complete replacement of the upper aft spar cap is required if any of the following conditions apply:

- A spar cap is cracked at three or more locations separated by 48 inches of uncracked spar cap between adjacent cracks
- A spar has three or more previously incorporated repairs and cracks extend from under any of these repairs
- A spar cap is cracked at a new location and the combination of new cracks and previously incorporated repairs separated by 48 inches of uncracked spar cap between adjacent cracks (repairs) totals three or more

If a spar cap is replaced with 7050-T76511 aluminum, the depot activity shall make the following entry in the Miscellaneous Section of the aircraft logbook: "L/H upper aft spar cap was replaced during PDM with 7050-T76511 aluminum spar cap."

Requirement - Inspect zone 11.7. Aft spar caps, aft face, upper and lower (b) (7)(E). Inspect for defects. Pay particular attention to (b) (7)(E)

(b) (7)(E) upper caps. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

- ¹ Fluorescent penetrates only 1 inch inboard of (b) (7)(E)
- ² Fluorescent penetrates only 1 inch outboard of (b) (7)(E)

Using fluorescent penetrate, inspect upper spar cap radius for a minimum of 1 inch inboard of flap tracks at (b) (7)(E) 6 inches inboard and outboard of flap tracks at (b) (7)(E) if previous repair is present, inspect a minimum of 6 inches inboard and outboard of repairs.

Caution

Do not use blast techniques for paint removal of spar caps to comply with NDI requirements. Fatigue life of spar caps may be degraded.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.11 Aft Spar Cap - SSI-W47

Requirement - The depot activity shall inspect upper aft right wing spar cap radius along entire wingspan from (b) (7)(E) using eddy current NDI technique. To ensure inspection results are not affected by paint/sealant accumulations, the spar cap radius shall be chemically stripped prior to inspection.

Complete replacement of the upper aft spar cap is required if any of the following conditions apply:

- A spar cap is cracked at three or more locations separated by 48 inches of uncracked spar cap between adjacent cracks
- A spar has three or more previously incorporated repairs and cracks are growing from under any of these repairs
- Repairs separated by 48 inches of uncracked spar cap between adjacent cracks (repairs) totals three or more

If a spar cap is replaced with 7050-T76511 aluminum, the depot activity shall make the following entry in the Miscellaneous Section of the aircraft logbook: "R/H upper aft spar cap was replaced during PDM with 7050-T76511 aluminum spar cap."

Requirement - Inspect zone 14.7. Aft spar caps, aft face, upper and lower (b) (7)(E) inspect for defects. Pay particular attention to (b) (7)(E)

(b) (7)(E)

upper caps. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

1 Fluorescent penetrate only 1 inch inboard of (b) (7)(E)

2 Fluorescent penetrate only 1 inch outboard of (b) (7)(E)

Using fluorescent penetrate, inspect upper spar cap radius for a minimum of 1 inch inboard of flap tracks at (b) (7)(E) 6 inches inboard and outboard of flap tracks at (b) (7)(E) If previous repair is present, inspect a minimum of 6 inches inboard and outboard of repairs.

Caution

Do not use blast techniques for paint removal of spar caps to comply with NDI requirements. Fatigue life of spar caps may be degraded.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.12 Main Landing Gear (MLG) Drag Strut Fittings - SSI-W21

Requirement - Inspect zone 2.4. MLG drag strut fittings and attachments: Inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect the inboard and outboard vertical flanges of both horizontal legs on the inboard drag strut for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.13 Main Landing Gear (MLG) Drag Strut Fittings - SSI-W59

Requirement - Inspect zone 3.4. MLG drag strut fittings and attachments: inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect the inboard and outboard vertical flanges of both horizontal legs on the inboard drag strut for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.14 Left Main Landing Gear Ribs - SSI-W18

Requirement - Inspect zone 11.1. MLG Ribs (b) (7)(E). SSI area 1 through 7. Inspect for cracks, corrosion, loose fasteners, bent and or buckled structure, and other defects. Suspected cracks are to be verified by fluorescent penetrate NDI technique. SSI area 8, inspect jack pad hole by fluorescent penetrate NDI technique. If crack is found, map cracked area utilizing ultrasonic techniques.

Performance Specification - This requirement is met when:

- Structural inspection is completed.
- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.16 Right Main Landing Gear Ribs - SSI-W56

Requirement - Inspect zone 14.1. MLG Ribs (b) (7)(E). SSI area 1 through 7, inspect for cracks, corrosion, loose fasteners, bent and or buckled structure, and other defects. Suspected cracks are to be verified by fluorescent penetrate NDI technique. SSI area 8, inspect jack pad hole by fluorescent penetrate NDI technique. If crack is found, map cracked area utilizing ultrasonic techniques.

Performance Specification - This requirement is met when:

- Structural inspection is completed.
- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.18 Wing Planks - SSI-W26

Requirement - Inspect zone 11.2. Wing planks, centroid risers, skate angles, fillet dome nuts, and skin doublers for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Remove centroid riser cavity blocks and use eddy current to inspect the centroid riser cavity radii at (b) (7)(E). Ultrasonically inspect 3" diameter around each dome nut hole on the exterior surfaces of the upper wing planks at (b) (7)(E). Inspection of areas inaccessible due to permanent structure is not required.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.19 Wing Planks - SSI-W64

Requirement - Inspect zone 14.2. Wing planks, centroid risers, skate angles, fillet dome nuts, and skin doublers for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Remove centroid riser cavity blocks and use eddy current to inspect the centroid riser cavity radii at (b) (7)(E).

(b) (7)(E) Ultrasonically inspect 3" diameter around each dome nut hole on the exterior surfaces of the upper wing planks at (b) (7)(E). Inspection of areas inaccessible due to permanent structure is not required.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.20 Wing Span wise Splices and Runouts - SSI-W28

Requirement - Inspect zone 11.2. Wing spanwise splices and runouts, upper and lower surfaces (b) (7)(E) (b) (7)(E). Ultrasonically inspect the wing plank splice gaps and runouts as listed below, except for areas inaccessible due to permanent structure:

BuNo 148883 through 153428 inclusive:

Upper Surface: (b) (7)(E)

Lower Surface: (b) (7)(E)

Upper and Lower Surface Runouts: 8 inches inboard and 4 inches outboard of planks 4 through 9, (b) (7)(E)

BuNo 153429 and subsequent:

Upper Surface: (b) (7)(E)

Lower Surface: (b) (7)(E)

Upper Surface Runouts: 8 inches inboard and 4 inches outboard of planks 6 through 9, (b) (7)(E)

Lower Surface Runouts: 8 inches inboard and 4 inches outboard of planks 7 through 9, (b) (7)(E)

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.21 Wing Spanwise Splices and Runouts - SSI-W66

Requirement - Inspect zone 14.2. Wing spanwise splices and runouts, upper and lower surfaces, (b) (7)(E) (b) (7)(E); Ultrasonically inspect the wing plank splice gaps and runouts as listed below, except for areas inaccessible due to permanent structure:

BuNo 148883 through 153428 inclusive:

Upper Surface: (b) (7)(E)

Lower Surface: (b) (7)(E)

Upper and Lower Surface Runouts: 8 inches inboard and 4 inches outboard of planks 4 through 9, (b) (7)(E)

BuNo 153429 and subsequent:

Upper Surface: (b) (7)(E)

Lower Surface: (b) (7)(E)

Upper Surface Runouts: 8 inches inboard and 4 inches outboard of planks 6 through 9, (b) (7)(E)

Lower Surface Runouts: 8 inches inboard and 4 inches outboard of planks 7 through 9. (b) (7)(E)

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.22 LEFT Wing Access Panels - SSI-W29

Requirement - Inspect zone 11.2. Wing access panels, cutouts, and probe holes, upper surface: Inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Use Eddy current to inspect all access panels and fuel probe radii for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.23 RIGHT Wing Access Panels - SSI-W67

Requirement - Inspect zone 14.2. Wing access panels, cutouts, and probe holes, upper surface: Inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Use Eddy current to inspect all access panels and fuel probe radii for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.24 Wing Planks - SSI-W30

Requirement - Inspect zone 11.2. Wing access panels, centroid risers, skate angles, fillet dome nuts and mooring point jack pad, lower surface, inboard: Inspect for defects, inspect wing plank surface around MLG bumper pads. Remove and inspect under pads if any evidence of corrosion is found. Suspected cracks shall be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect 3" diameter around each dome nut hole on the exterior surfaces of the lower wing planks at (b) (7)(E). Use eddy current to inspect the centroid riser cavity radii at (b) (7)(E). Ultrasonically inspect around mooring point (jack pad) hole on upper surface of plank of No. 8 for damage. Ultrasonically inspect around mooring point (jack pad) hole on plank No. 8 for damage on back side of plank. Pay particular attention to the interior surface of the plank.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.25 Wing Planks - SSI-W68

Requirement - Inspect zone 14.2. Wing access panels, centroid risers, skate angles, fillet dome nuts and mooring point jack pad, lower surface, inboard: Inspect for defects, inspect wing plank surface around MLG bumper pads. Remove and inspect under pads if any evidence of corrosion is found. Suspected cracks shall be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect 3" diameter around each dome nut hole on the exterior surfaces of the lower wing planks at (b) (7)(E). Use eddy current to inspect the centroid riser cavity radii at (b) (7)(E). Ultrasonically inspect around mooring point (jack pad) hole on upper surface of plank of No. 8 for damage. Ultrasonically inspect around

mooring point (jack pad) hole on plank No. 8 for damage on back side of plank. Pay particular attention to the interior surface of the plank.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.26 Wing Access Panels - SSI-W33

Requirement - Inspect zone 11.2. Wing access panels, and cutouts, lower surface: Inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Use Eddy current to inspect all access panel flanges and other openings radii for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.27 Wing Access Panels - SSI-W71

Requirement - Inspect zone 14.2. Wing access panels, and cutouts, lower surface: Inspect for defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Use Eddy current to inspect all access panel flanges and other openings radii for cracks.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.28 Forward Spar Web – SSI-S22 (All Aircraft With Greater Than 15,000 Flight Hours and No Previous

Repair Installed) (Zone 11.5)

Requirement – The depot activity shall inspect zone 11.5 lower spar cap and web at (b) (7)(E). The depot activity shall perform ultrasonic or eddy current inspection with a bolt hole probe of spar to web fastener holes in the web as marked. Install repair (if required) IAW drawing no. (36659) 982103 at (b) (7)(E) and IAW drawing no. (36659) 982102 at (b) (7)(E) (over and above).

- **Performance Specification:** This requirement is met when
- NDI is completed
- Inspection results have been recorded and classified; and
- Discrepancies approved by the AGR have been corrected

6-1.29 Forward Spar Web – SSI-S23 (All Aircraft With Greater Than 15,000 Flight Hours and No Previous

Repair Installed) (Zone 14.5)

Requirement – The depot activity shall inspect zone 14.5 lower spar cap and web at (b) (7)(E). The depot activity shall perform ultrasonic or eddy current inspection with a bolt hole probe of spar to

web fastener holes in the web as marked. Install repair (if required) IAW drawing no. (36659) 982103 at (b) (7)(E) and IAW drawing no. (36659) 982102 at (b) (7)(E) (**over and above**).

Performance Specification: This requirement is met when

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the AGR have been corrected.

6-1.30 Wing Center Section Upper Surface Wing Planks - SSI-F39

Requirement - Inspect zone 16.1. Perform detail inspection for defects. Wing center section upper surface planks, external (b) (7)(E) right. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Ultrasonically inspect plank splices, except those areas inaccessible due to permanent structure.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.31 Wing Plank Dome Nuts - SSI-F48

Requirement - Inspect zone 16.3. Inspect for cracks, corrosion, loose fasteners, bent and/or buckled structures, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Pay particular attention to all dome nuts and wing planks at the (b) (7)(E) splice strap.

Note

Replace only discrepant dome nuts

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.32 Wing Plank Dome Nuts - SSI-F49

Requirement - Inspect zone 16.4. (b) (7)(E) Inspect for cracks, corrosion, loose fasteners, bent and/or buckled structures, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques. Pay particular attention to all dome nuts and wing planks at the (b) (7)(E) splice strap.

Note

Replace only discrepant dome nuts

Performance Specification – This requirement is met when:

- Ultrasonic inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.33 Upper Forward Attach Fitting - SSI-S1

Requirement - Inspect zone 11.1. Upper forward attach fitting (b) (7)(E) Using fluorescent penetrate, inspect fitting at 1 inch barrel nut access hole.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.34 Upper Forward Attach Fitting - SSI-S2

Requirement - Inspect zone 14.1. Upper forward attach fitting (b) (7)(E) Using fluorescent penetrator, inspect fitting at 1 inch barrel nut access hole.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.35 Lower Fitting - SSI-S3

Requirement - Inspect zone 11.1. Lower forward attach fitting (b) (7)(E) Using fluorescent penetrator, inspect fitting at 1 inch barrel nut access hole.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.36 Lower Fitting - SSI-S4

Requirement - Inspect zone 14.1. Lower forward attach fitting (b) (7)(E) Using fluorescent penetrator, fitting at 1 inch barrel nut access hole.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.37 Nacelle Attach Plates and Spars - SSI-S5

Requirement - Inspect zone 11.5. Nacelle attach plates and spars, (b) (7)(E) Inspect upper nacelle attach plates by removing marked fasteners and eddy current testing the hole with a hole probe.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.38 Nacelle Attach Plates and Spars - SSI-S6

Requirement - Inspect zone 14.5. Nacelle attach plates and spars, forward (b) (7)(E) ; Inspect upper nacelle attach plates by removing marked fasteners and eddy current testing the hole with a hole probe.

Performance Specification - This requirement is met when:

- NDI inspection is completed.

- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.39 Riser Runouts - SSI-S13

Requirement - Inspect zone 11.2. Riser runouts, upper surface (b) (7)(E) Eddy current inspect the reduced riser runouts on wing planks 3, 4, and 5 upper surface.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.40 Riser Runouts - SSI-S14

Requirement - Inspect zone 14.2. Riser runouts, upper surface (b) (7)(E); Use eddy current to inspect the reduced riser runouts on wing planks 3, 4, and 5 upper surfaces.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.41 Lower Beam Cap - SSI-S19

Requirement - Inspect zone 17.3. Lower beam cap, (b) (7)(E) left and right. Visually inspect the lower beam cap for cracks, corrosion, and other defects.

Performance Specification - This requirement is met when:

- Inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.42 Canted Bulkhead at Horizontal Stabilizer - SSI-S20

Requirement - Inspect zone 15.2. Canted bulkhead at horizontal stabilizer, (b) (7)(E), left and right: Use eddy current to inspect the 0.62 inch radius at the lower spar cap for cracks, corrosion and other defects.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.

6-1.43 Vertical Stabilizer Attach Angle - SSI-S21

Requirement - Inspect zone 15.9. Vertical stabilizer attachment angle, (b) (7)(E). Use eddy current to inspect the outlined areas of the attachment angle for cracks without removing the fasteners.

Performance Specification - This requirement is met when:

- NDI inspection is completed.
- Inspection results have been recorded and classified.
- Discrepancies approved by the AGR have been corrected.
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6-1.44 Skate Angles - SSI-S7 ("Lead-The-Fleet") (Zone 11.2)

Requirement - The depot activity shall perform a detailed inspection of the skate angles, (b) (7)(E) upper surface. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.45 Skin Doubler - SSI-S9 and CBP-SSI 003 & 004 ("Lead-The-Fleet") (Zone 11.2)

Requirement - The depot activity shall perform a detailed inspection of skin doubler, (b) (7)(E) Use radiography to inspect outlined areas for cracks.

Additional CBP Requirement The depot activity shall perform a detailed internal inspection of skin doubler, (b) (7)(E) Use ECSS to inspect additional areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.46 Skate Angles - SSI-S11 ("Lead-The-Fleet") (Zone 11.2)

Requirement. The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) upper surface. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.47 Skate Angles - SSI-S15 ("Lead-The-Fleet") (Zone 11.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) lower surface areas for cracks. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.48 Skate Angles - SSI-S17 ("Lead-The-Fleet") (Zone 11.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) lower surface. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.49 Skate Angles - SSI-S8 (“Lead-The-Fleet”) (Zone 14.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) upper surface. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.50 Skin Doubler - SSI-S10 (“Lead-The-Fleet”) (Zone 14.2)

Requirement - The depot activity shall perform a detailed inspection of skin doubler, (b) (7)(E). Use radiography to inspect outlined areas for cracks.

Additional CBP Requirement The depot activity shall perform a detailed internal inspection of skin doubler, (b) (7)(E). Use ECS to inspect additional areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.51 Skate Angles - SSI-S12 (“Lead-The-Fleet”) (Zone 14.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) upper surface. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.52 Skate Angles - SSI-S16 (“Lead-The-Fleet”) (Zone 14.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E), lower surface areas for cracks. Use radiography to inspect outlined areas for cracks.

Performance Specification - This requirement is met when:

- NDI is completed;

- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected.

6-1.53 Skate Angles - SSI-S18 (“Lead-The-Fleet”) (Zone 14.2)

Requirement - The depot activity shall perform a detailed inspection of skate angles, (b) (7)(E) lower surface. Use radiography to inspect outlined areas for cracks

Performance Specification - This requirement is met when;

- NDI is completed;
- Inspection results have been recorded and classified; and
- Discrepancies approved by the Government have been corrected

6-1.54 Stringer 2 & 71 Inspection Forward of (b) (7)(E) Ring SSI-CBP-001

Requirement - The depot activity shall perform a detailed inspection of *Stringer 2 & 71 Inspect Forward of (b) (7)(E) Ring*. ECSS Stringer 2 & 71 On opposite Side Of Stringer End Fitting

Performance Specification - This requirement is met when NDI is completed

Inspection results have been recorded and classified; and
Discrepancies approved by the Government have been corrected

6-1.55 Outer Wings Lower Panel 3 at Scavenge Pump SSI-CBP 002

Requirement - The depot activity shall perform a detailed inspection of Outer Wings Lower Panel 3 riser ECSS Riser above and below hole or BHEC If fastener removed

Performance Specification - This requirement is met when

NDI is completed
Inspection results have been recorded and classified; and
Discrepancies approved by the Government have been corrected

Structural Inspection Requirements for AEW aircraft only

6-2.1 Pylon FWD LH Strut to Fuselage Mounting, (b) (7)(E) SSI-AEW1

Requirement - Inspect lower pylon strut fitting and fuselage mounting attachments, lugs and bushings for corrosion, loose fasteners, bent/buckled structure, and other defects. Inspect lower strut fitting region for evidence of water entrapment. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when;

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.2 Pylon FWD RH Strut to Fuselage Mounting (b) (7)(E) **SSI-AEW2**

Requirement - Inspect lower pylon strut fitting and fuselage mounting attachments, lugs and bushings for corrosion, loose fasteners, bent/buckled structure, and other defects. Inspect lower strut fitting region for evidence of water entrapment. Suspected cracks are to be using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.3 Pylon AFT LH Strut to Fuselage Mounting (b) (7)(E) **SSI-AEW3**

Requirement - Inspect lower pylon strut fitting and fuselage mounting attachments, lugs and bushings for corrosion, loose fasteners, bent/buckled structure, and other defects. Inspect lower strut fitting region for evidence of water entrapment. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.4 Pylon AFT RH Strut to Fuselage Mounting (b) (7)(E) **SSI-AEW4**

Requirement - Inspect lower pylon strut fitting and fuselage mounting attachments, lugs and bushings for corrosion, loose fasteners, bent/buckled structure, and other defects. Inspect lower strut fitting region for evidence of water entrapment. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-1.2.5 Fuselage Rotodome Support FWD Strap External (b) (7)(E) **SSI-AEW5**

Requirement - Inspect strap and surrounding area for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.
NDI inspection is completed.
Inspection results have been recorded and classified.
Discrepancies approved by the AGR have been corrected.

6-2.6 Fuselage Rotodome Support AFT Strap External, (b) (7)(E) - SSI-AEW6

Requirement - Inspect strap and surrounding area for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.
NDI inspection is completed.
Inspection results have been recorded and classified.
Discrepancies approved by the AGR have been corrected.

6-2.6 Fuselage Rotodome Support LH AFT Former Web Splices, Bathtub Fittings and Lower Former Splice Joint at (b) (7)(E) - Internal, (b) (7)(E) - SSI-AEW7

Requirement - Inspect LH AFT strut attachment bathtub fittings, former web splices and lower former splice joint, including area between formers, for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Also inspect the four adjacent stringer cutouts in formers on each side of bathtub fittings for cracks in corner radius. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.
NDI inspection is completed.
Inspection results have been recorded and classified.
Discrepancies approved by the AGR have been corrected.

6-2.9 Fuselage Rotodome Support RH AFT Former Web Splices, Bathtub Fittings and Lower Former Splice Joint at (b) (7)(E) - Internal, (b) (7)(E) - SSI-AEW8

Requirement - Inspect RH AFT strut attachment bathtub fittings, former web splices and lower former splice joint, including area between formers, for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Also inspect the four adjacent stringer cutouts in formers on each side of bathtub fittings for cracks in corner radius. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.
NDI inspection is completed.
Inspection results have been recorded and classified.
Discrepancies approved by the AGR have been corrected.

6-2.10 Fuselage Rotodome Support LH FWD Former Web Splices, Bathtub Fittings and Lower Former Splice Joint at (b) (7)(E)- Internal (b) (7)(E) - SSI-AEW9

Requirement - Inspect LH FWD strut attachment bathtub fittings, former web splices and lower former splice joint, including area between formers, for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Also inspect the four adjacent stringer cutouts in formers on each side of bathtub fittings for cracks in corner radius. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.11 Fuselage Rotodome Support RH FWD Former Web Splices, Bathtub Fittings and Lower Former Splice Joint at (b) (7)(E) - SSI-AEW10

Requirement - Inspect RH FWD strut attachment bathtub fittings, former web splices and lower former splice joint, including area between formers, for cracks, corrosion, loose fasteners, bent/ buckled structure, and other defects. Also inspect the four adjacent stringer cutouts in formers on each side of bathtub fittings for cracks in corner radius. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.12 Pylon FWD LH Upper Strut to Housing Attachment, (b) (7)(E) - SSI-AEW11

Requirement - Inspect upper FWD LH pylon strut fitting and rotodome bearing support housing mounting attachments, lugs and bushings for cracks corrosion, loose fasteners, bent/buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.13 Pylon FWD RH Upper Strut to Housing Attachment, (b) (7)(E) - SSI-AEW12

Requirement - Inspect upper FWD RH pylon strut fitting and rotodome bearing support housing mounting attachments, lugs and bushings for cracks corrosion, loose fasteners, bent/buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.14 Pylon AFT LH Upper Strut to Housing Attachment. (b) (7)(E) - SSI-AEW13

Requirement - Inspect upper AFT LH pylon strut fitting and rotodome bearing support housing mounting attachments, lugs and bushings for cracks corrosion, loose fasteners, bent/buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.15 Pylon AFT RH Upper Strut to Housing Attachment. (b) (7)(E) - SSI-AEW14

Requirement - Inspect upper AFT RH pylon strut fitting and rotodome bearing support housing mounting attachments, lugs and bushings for cracks corrosion, loose fasteners, bent/buckled structure, and other defects. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.

6-2.16 Pylon Interior Box Webs and Access Panel Openings - SSI-AEW15

Requirement - Inspect visible areas of the pylon interior box webs and attachments for cracks, corrosion, loose fasteners, bent/buckled structure, and other defects. LH and RH hydraulic access panels (R12 and R14) opening corner radii for cracks. Suspected cracks are to be verified using fluorescent penetrate NDI techniques.

Performance Specification - This requirement is met when:

Structural inspection is completed.

NDI inspection is completed.

Inspection results have been recorded and classified.

Discrepancies approved by the AGR have been corrected.



Aircraft zones

- 5.1 RADOMDE - EXTERNAL
- 5.2 RADOME - INTERNAL
- 6.2 NLG WELL - INTERNAL
- 7.1 APU/AIR CONDITIONING SERVICE BAY - INTERNAL
- 8.1 BOMB BAY AND DOORS - INTERNAL
- 8.2 FUEL COMPARTMENT - INTERNAL
- 8.6 BOMB BAY FUEL TANK - INTERNAL
- 9.1 WATER ALCOHOL/SERVICE BAY - INTERNAL
- 10.1 HYDRAULIC SERVICE CENTER - INTERNAL
- 16.2 WING CENTER SECTION - INTERNAL
- 17.1 FLIGHT STATION FUSELAGE - EXTERNAL
- 17.2 FLIGHT STATION - INTERNAL
- 17.3 FLIGHT STATION UNDERFLOOR - INTERNAL
- 18.1 TAC/ OBS FUSELAGE - EXTERNAL
- 18.2 TAC/ OBS COMPARTMENT - INTERNAL
- 19.1 TACTICAL STATION FUSELAGE - EXTERNAL
- 19.2 TACTICAL/SENSOR STATION - INTERNAL

- 20.1 CLUB SEATING/ OBS. FUSELAGE - EXTERNAL
- 20.2 CLUB SEATING/ OBS. FUSELAGE - INTERNAL
- 20.6 ROTODOME AND PYLON (AEW)
- 21.1 REST AREA FUSELAGE - EXTERNAL
- 21.2 REST AREA - INTERNAL
- 21.3 DORSAL FIN - INTERNAL
- 22.1 UNDERFLOOR AREA - INTERNAL

AFT RADOME AND EMPENNAGE ZONES

- 15.1 EMPENNAGE - EXTERNAL
- 15.2 EMPENNAGE - INTERNAL
- 15.3 LEFT HORIZONTAL STABILIZER - INTERNAL
- 15.4 LEFT HORIZONTAL STABILIZER AND ELEVATOR - EXTERNAL
- 15.5 LEFT HORIZONTAL STABILIZER TRAILING EDGE AND ELEVATOR - INTERNAL
- 15.6 RIGHT HORIZONTAL STABILIZER - INTERNAL
- 15.7 RIGHT HORIZONTAL STABILIZER AND ELEVATOR - EXTERNAL
- 15.8 RIGHT HORIZONTAL STABILIZER TRAILING EDGE AND ELEVATOR - INTERNAL
- 15.9 VERTICAL STABILIZER - INTERNAL
- 15.10 VERTICAL STABILIZER-TRAILING EDGE AND RUDDER - INTERNAL
- 15.11 VERTICAL STABILIZER AND RUDDER - EXTERNAL
- 15.12 RADOME - EXTERNAL
- 15.13 RADOME - INTERNAL
- 15.14 HF ANTENNA BOOM

(b) (7) (E)

(b) (7) (E)