

(tear straps) that are bonded to skin panels located above stringer S-26 from body station (BS) 259 to BS 1016 on both sides of the airplane.

**Note 3:** If the skin panel is solid with no doublers (tear straps) bonded to it, the inspections required by this AD are not necessary for that skin panel.

(1) Prior to the accumulation of 20,000 total flight cycles, or within 5,000 flight cycles after the effective date of this AD, whichever occurs later, accomplish paragraphs (a)(1)(i) and (a)(1)(ii) of this AD, in accordance with the Accomplishment Instructions of the service bulletin. Repeat the inspections thereafter at intervals not to exceed 5,000 flight cycles, until accomplishment of paragraph (a)(2) of this AD.

(i) Perform an external general visual inspection of all affected areas NOT specified in paragraph (a)(1)(ii) of this AD to detect cracks or corrosion of bonded skin panels.

(ii) Perform an external detailed inspection to detect cracks or corrosion of bonded skin panels at all stringers, window belts, lap joints, and butt splice joints.

**Note 4:** For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

**Note 5:** For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(2) Prior to the accumulation of 50,000 total flight cycles, but after the accumulation of 4,500 total flight cycles; or within 20,000 flight cycles after the effective date of this AD; whichever occurs later; accomplish paragraphs (a)(2)(i) and (a)(2)(ii) of this AD. Accomplishment of the requirements of paragraphs (a)(2)(i) and (a)(2)(ii) of this AD constitutes terminating action for the repetitive inspection requirement of paragraph (a)(1) of this AD.

(i) For "Zone A" areas (as defined in the Accomplishment Instructions and Figure 2 of the service bulletin): Perform a one-time internal detailed inspection to detect cracks or corrosion of bonded skin panels, or delamination of the skin doublers from the bonded skin panels.

(ii) For "Zone B" areas (as defined in the Accomplishment Instructions and Figure 2 of

the service bulletin): Perform an internal or external ultrasonic inspection to detect cracks or corrosion of bonded skin panels, or delamination of the skin doublers from the bonded skin panels.

#### Initial and Repetitive Inspections (L/N 1 through 2947 inclusive)

(b) For airplanes having L/N 1 through 2947 inclusive, on which any bonded skin panel was replaced with a new or serviceable, Boeing-built, bonded skin panel prior to October 1, 1997: Accomplish the actions required by paragraphs (b)(1) and (b)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1179, Revision 2, dated October 25, 2001.

(1) Within 20,000 flight cycles after replacement of the bonded skin panel, or within 5,000 flight cycles after the effective date of this AD, whichever occurs later, accomplish paragraphs (b)(1)(i) and (b)(1)(ii) of this AD. Repeat the inspections thereafter at intervals not to exceed 5,000 flight cycles, until accomplishment of paragraph (b)(2) of this AD.

(i) Perform an external general visual inspection of all affected areas NOT specified in paragraph (b)(1)(ii) to detect cracks or corrosion of bonded skin panels.

(ii) Perform a detailed inspection to detect cracks or corrosion of bonded skin panels at all stringers, window belts, lap joints, and butt splice joints.

(2) Within 50,000 flight cycles after replacement of the bonded skin panel, but after the accumulation of 4,500 flight cycles after such replacement; or within 20,000 flight cycles after the effective date of this AD; whichever occurs later; accomplish paragraphs (b)(2)(i) and (b)(2)(ii) of this AD. Accomplishment of the requirements of paragraphs (b)(2)(i) and (b)(2)(ii) of this AD constitutes terminating action for the repetitive inspection requirement of paragraph (b)(1) of this AD.

(i) For "Zone A" areas (as defined in the Accomplishment Instructions and Figure 2 of the service bulletin): Perform a one-time internal detailed inspection to detect cracks or corrosion of bonded skin panels or delamination of the skin doublers from the bonded skin panels.

(ii) For "Zone B" areas (as defined in the Accomplishment Instructions and Figure 2 of the service bulletin): Perform an internal or external ultrasonic inspection to detect cracks or corrosion of bonded skin panels, or delamination of the skin doublers from the bonded skin panels.

#### Corrective Actions

(c) If any crack, corrosion, or delamination is detected during any inspection required by paragraph (a) or (b) of this AD, prior to further flight, accomplish the actions required by either paragraph (c)(1) or (c)(2) of this AD.

(1) Replace the cracked, corroded, or delaminated skin panel with a new or serviceable skin panel manufactured by Boeing on or after April 1, 1997, in accordance with Figure 2 and the Accomplishment Instructions of Boeing Service Bulletin 737-53-1179, Revision 2, dated October 25, 2001.

(2) Accomplish corrective actions (including additional inspections and repairs) in accordance with Figure 2 and the "Delamination and Crack Repair" section of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1179, Revision 2, dated October 25, 2001, except as provided by paragraph (d) of this AD.

#### Exception to Repair Procedures

(d) Where Boeing Service Bulletin 737-53-1179, Revision 2, dated October 25, 2001, specifies that repair of a cracked, corroded, or delaminated skin panel is to be accomplished in accordance with instructions received from Boeing, this AD requires that the repair be accomplished in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

#### Operator's Equivalent Procedures

(e) Where Boeing Service Bulletin 737-53-1179, Revision 2, dated October 25, 2001, specifies that the inspections required by this AD may be accomplished in accordance with an "equivalent" procedure, the inspections must be accomplished in accordance with the chapter of the Boeing 737 Nondestructive Test Manual specified in the service bulletin.

#### Credit for Actions Accomplished Previously

(f) Where the service bulletin refers to specific sections of the Boeing 737 Structural Repair Manual (SRM) for repair instructions, repairs accomplished before the effective date of this AD per those SRM sections eliminate the requirement to do the inspections required by this proposed AD for the repaired area only.

(g) Internal detailed inspections of "Zone A" skin panels accomplished before the effective date of this AD in accordance with the original issue of Boeing Service Bulletin 737-53-1179, dated June 22, 1995, or Revision 1, dated September 30, 1999, are acceptable for compliance with paragraph (a)(2)(i) of this AD, provided that they were accomplished after the accumulation of 4,500 total flight cycles.

(h) Inspections accomplished per the Corrosion Prevention and Control Program established by AD 90-25-01, amendment 39-6789, are acceptable for compliance with the external general visual inspections of "Zone A" skin panels required by paragraphs (a)(1)(i) and (b)(1)(i) of this AD, provided that the inspections are accomplished within the applicable compliance times specified in paragraphs (a) and (b) of this AD.

#### Alternative Methods of Compliance

(i) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal