

Bulletin MD80–30–071, Revision 02, dated February 6, 1996; or McDonnell Douglas Service Bulletin MD80–30–078, Revision 01, dated April 8, 1997: Accomplish paragraphs (d)(1)(i) and (d)(1)(ii) of this AD.

(i) Remove secondary access covers, and perform a one-time detailed visual inspection to detect discrepancies (mechanical damage or punctures in the upper skin of the blanket, prying damage on the panel, and fuel leakage) of the overwing heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997. And,

(ii) Accomplish paragraph (d)(1)(ii)(A) or (d)(1)(ii)(B) of this AD.

(A) Perform dielectric withstanding voltage and resistance tests in accordance with McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997. Repeat the tests thereafter at intervals not to exceed 150 days, until installation of an HPP in accordance with paragraph (f)(1)(i) or (f)(1)(ii) of this AD, as applicable.

(B) Deactivate the overwing heater blanket system until accomplishment of dielectric withstanding voltage and resistance tests specified in paragraph (d)(1)(ii)(A). If the overwing heater blanket system is deactivated as provided by this paragraph, continue to accomplish the requirements of paragraphs (a), (b), and (c) of this AD.

Note 2: For the purposes of this AD, a detailed visual 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) For airplanes on which the overwing heater blanket system was installed in accordance with TDG Aerospace, Inc., STC SA6042NM: Accomplish paragraphs (d)(2)(i) and (d)(2)(ii) of this AD.

(i) Remove secondary access covers, and perform a one-time detailed visual inspection to detect discrepancies (mechanical damage or punctures in the upper skin of the blanket, prying damage on the panel, and fuel leakage) of the overwing heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997. And,

(ii) Accomplish paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this AD.

(A) Perform dielectric withstanding voltage and resistance tests in accordance with McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997. Repeat the tests thereafter at intervals not to exceed 150 days, until installation of an EPD in accordance with paragraph (f)(2)(i) of this AD.

(B) Deactivate overwing heater blanket system until accomplishment of dielectric withstanding voltage and resistance tests specified in paragraph (d)(2)(ii)(A). If the overwing heater blanket system is deactivated as provided by this paragraph, continue to accomplish the requirements of paragraphs (a), (b), and (c) of this AD.

Corrective Action

(e) If any discrepancy is detected during any inspection or test performed in accordance with paragraph (d) of this AD, prior to further flight, repair or replace the affected heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997; except as provided in paragraph (h) of this AD.

Note 3: McDonnell Douglas Alert Service Bulletin MD80–30A087, dated September 22, 1997, references TDG Aerospace Document E95–451, Revision B, dated January 31, 1996, as an additional source of service information for accomplishment of repair or replacement of the overwing heater blanket.

Installation of Overwing Heater Blanket or Primary Upper Wing Ice Detection System

(f) Within 3 years after May 7, 2001, do the requirements of either paragraph (f)(1) or (f)(2) of this AD.

(1) Do the actions specified in paragraph (f)(1)(i) or (f)(1)(ii) of this AD, as applicable.

(i) For airplanes listed in Group 1 in McDonnell Douglas Service Bulletin MD80–30–090, dated October 19, 1999: Install an overwing heater blanket system in accordance with McDonnell Douglas Service Bulletin MD80–30–071, Revision 02, dated February 6, 1996; and modify and reidentify the existing HPP in accordance with McDonnell Douglas Service Bulletin MD80–30–090. Modification of the existing HPP in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(1)(ii)(A) of this AD.

(ii) For airplanes listed in Group 2 in McDonnell Douglas Service Bulletin MD80–30–090, dated October 19, 1999: Install an overwing heater blanket system in accordance with McDonnell Douglas Service Bulletin MD80–30–078, Revision 01, dated April 8, 1997; and install an HPP and associated wiring in accordance with McDonnell Douglas Service Bulletin MD80–30–090. Installation of an HPP and associated wiring in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(1)(ii)(A) of this AD.

Note 4: For other airplanes, accomplishment of the requirements of paragraph (f)(1)(i) or (f)(1)(ii) of this AD may be acceptable per paragraph (i)(1) of this AD.

(2) Accomplish the actions specified in either paragraph (f)(2)(i), (f)(2)(ii), or (f)(2)(iii) of this AD.

(i) Install an overwing heater blanket system, and install an EPD that provides a circuit protection function to the overwing heater blanket, in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. Installation of an EPD in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(2)(ii)(A) of this AD.

Note 5: Installation of an overwing heater blanket system and installation of an EPD that provides a circuit protection function to the overwing heater blanket, in accordance with TDG Aerospace, Inc., SA6042NM, or

TDG Master Drawing List (MDL) E93–104, Revision R, dated October 25, 2000; is an approved means of compliance with the requirements of paragraph (f)(2)(i) of this AD.

(ii) Install an overwing heater blanket system in accordance with a method approved by the Manager, Los Angeles ACO.

(iii) Install an FAA-approved primary upper wing ice detection system in accordance with a method approved by the Manager, Los Angeles ACO.

Note 6: Boeing (McDonnell Douglas) has received FAA approval of a primary upper wing ice detection system that is considered to be an alternative method of compliance (AMOC) with the requirements of paragraph (f)(2)(iii) of this AD. Information concerning such AMOCs may be obtained from the Los Angeles ACO.

AFM Revision

(g) Except as provided by paragraph (h) of this AD, prior to further flight after accomplishment of the installation required by paragraph (f)(1) or (f)(2) of this AD, revise the Limitations Section of the FAA-approved AFM to include the following. This may be accomplished by inserting a copy of this AD in the AFM. After accomplishment of the installation required by paragraph (f)(1) or (f)(2) of this AD and this AFM revision, the AFM revisions required by paragraphs (a) and (b) of this AD may be removed from the AFM, and the inspection aids required by paragraph (c) of this AD may be removed from the airplane.

“Ice on Wing Upper Surfaces

Caution

Ice shedding from the wing upper surface during takeoff can cause severe damage to one or both engines, leading to surge, vibration, and complete thrust loss. The formation of ice can occur on wing surfaces during exposure of the airplane to normal icing conditions. Clear ice can also occur on the wing upper surfaces when cold-soaked fuel is in the main wing fuel tanks, and the airplane is exposed to conditions of high humidity, rain, drizzle, or fog at ambient temperatures well above freezing. Often, the ice accumulation is clear and difficult to detect visually. The ice forms most frequently on the inboard, aft corner of the main wing tanks. [End of Cautionary Note].”

MMEL Provision

(h) An airplane may be operated with an inoperative overwing heater blanket or primary upper wing ice detection system for 10 days per the Master Minimum Equipment List (MMEL), provided that the actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD are done before further flight.

(1) Revise the Limitations Section of the FAA-approved AFM to include the following. This may be accomplished by inserting a copy of this AD in the AFM.

“Ice on Wing Upper Surfaces

Caution

The wing upper surfaces must be physically checked for ice when the airplane has been exposed to conditions conducive to