

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

Číslo: CAA-AD-T-094/2002

Nahrazuje CAA-AD-T-084/2002

Datum vydání: 01. října 2002

LETOUN - PALIVOVÉ NÁDRŽE - ZMĚNA V LETOVÉ PŘÍRUČCE

Týká se: letadel Boeing 737-600, -700, -700C, -800 a -900; 747 a 757, certifikovaných v kterékoliv kategorii.

Datum účinnosti: ihned po obdržení

Provést v termínech: Jak je popsáno v FAA E AD 2002-19-52, od data účinnosti tohoto PZZ.

Postup provedení prací: Dle v FAA E AD 2002-19-52 (příloha tohoto PZZ).

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická - Ing. Toman. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA E AD 2002-19-52, který nahrazuje FAA E AD 2002-18-52.

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Ředitel sekce technické
Úřad pro civilní letectví

2002-19-52 Boeing: Amendment 39-12900. Docket 2002-NM-249-AD. Supersedes Emergency AD 2002-18-52.

Applicability: All Model 737-600, -700, -700C, "800, and -900; 747; and 757 series airplanes; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (l)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fuel vapors from coming into contact with an ignition source in the center wing fuel tank, horizontal stabilizer fuel tank, center auxiliary fuel tank, or auxiliary fuel tanks 1 and 4, which could result in fire/explosion, accomplish the following:

Revision of Airplane Flight Manual (AFM): Model 737-600, -700, -700C, "800, and -900

(a) For Model 737-600, -700, -700C, "800, and -900 series airplanes: Within 14 days after the effective date of this AD, concurrently perform the actions required by paragraphs (a)(1) and (a)(2) of this AD:

(1) Remove the AFM revision required by paragraph (a) of emergency AD 2002-18-52; and

(2) Revise the Limitations section of the FAA-approved AFM to include the following (this may be accomplished by inserting a copy of this AD into the AFM):

"Certificate Limitations

The center tank fuel pumps must be OFF for takeoff if center tank fuel is less than 5,000 pounds (2,300 kilograms) with the airplane readied for initial taxi.

Both center tank fuel pump switches must be selected OFF when center tank fuel quantity reaches approximately 1,000 pounds (500 kilograms) during climb and cruise or 3,000 pounds (1,400 kilograms) during descent and landing. The fuel pumps must be positioned OFF at the first indication of fuel pump low pressure.

The CWT fuel quantity indication system must be operative to dispatch with CWT mission fuel.

Note

The CONFIG indicator will annunciate when center tank fuel exceeds 1,600 pounds (800 kilograms) and the center tank fuel pump switches are OFF. Do not accomplish the CONFIG non-normal procedure prior to or during takeoff with less than 5,000 pounds (2,300 kilograms) of center tank fuel or during descent and landing with less than 3,000 pounds (1,400 kilograms) of center tank fuel.

Note

In a low fuel situation, both center tank pumps may be selected ON and all center tank fuel may be used. If the main tanks are not full, the zero fuel gross weight of the airplane plus the weight of center tank fuel may exceed the maximum zero fuel gross weight by up to 5,000 pounds (2,300 kilograms) for takeoff, climb and cruise and up to 3,000 pounds (1,400 kilograms) for descent and landing, provided that the effects of balance (CG) have been considered.

If a center tank fuel pump fails with fuel in the center tank, accomplish the FUEL PUMP LOW PRESSURE non-normal procedure.

When defueling center or main wing tanks, the Fuel Pump Low Pressure indication lights must be monitored and the fuel pumps positioned to OFF at the first indication of fuel pump low pressure. Defueling with passengers on board is prohibited.

The limitations contained in this AD supersede any conflicting basic airplane flight manual limitations."

AFM Revision: Model 747-100, -200B, -200F, -200C, -100B, -300, -100B SUD, 747SR, and 747SP

(b) For Model 747-100, -200B, -200F, -200C, -100B, -300, -100B SUD, 747SR, and 747SP series airplanes: Within 14 days after the effective date of this AD, concurrently perform the actions required by paragraphs (b)(1) and (b)(2) of this AD:

(1) Remove the AFM revision required by paragraph (b) of emergency AD 2002-18-52; and

(2) Revise the Limitations section of the FAA-approved AFM to include the following (this may be accomplished by inserting a copy of the AD into this AFM):

"Certificate Limitations

Fueling and use of the center auxiliary fuel tank and auxiliary fuel tanks 1 and 4 (if installed) is prohibited.

The center wing tank (CWT) must contain a minimum of 17,000 pounds (7,700 kilograms) of fuel prior to engine start, if the CWT override/jettison pumps are to be selected ON during flight.

The CWT fuel quantity indication system must be operative to dispatch with CWT mission fuel.

Both CWT override/jettison pump switches must be selected OFF at or before the CWT fuel quantity reaches 7,000 pounds (3,200 kilograms), if the CWT fuel quantity is less than 50,000 pounds (22,700 kilograms) prior to engine start. The CWT override pumps may be selected ON during stabilized cruise conditions. Both CWT override/jettison pump switches must be selected OFF at or before the CWT fuel quantity reaches 3,000 pounds (1,400 kilograms).

Both CWT override/jettison pump switches must be selected OFF at or before the CWT fuel quantity reaches 3,000 pounds (1,400 kilograms), if the CWT fuel quantity is greater than or equal to 50,000 pounds (22,700 kilograms) prior to engine start.

Both CWT override/jettison pumps must be selected OFF when either CWT override/jettison fuel pump low pressure light illuminates.

Warning

Do not reset a tripped fuel pump circuit breaker.

Warning

Do not cycle the CWT pump switches from ON to OFF to ON with any continuous low pressure indication present.

Note

The CWT may be emptied normally in an emergency fuel jettison.

Note

In a low fuel situation, both CWT override/jettison pumps may be selected ON and all CWT fuel may be used.

If a center wing tank pump fails with fuel in the center tank, shut off the affected fuel pump.

If the main tanks are not full, the zero fuel gross weight of the airplane plus the weight of CWT tank fuel may exceed the maximum zero fuel gross weight by up to 7,000 pounds (3,200 kilograms) for takeoff, climb, cruise, descent, and landing, provided that the effects of balance (CG) have been considered.

When defueling center or main wing tanks, the Fuel Pump Low Pressure indication lights must be monitored and the fuel pumps positioned to OFF at the first indication of fuel pump low pressure. Defueling with passengers on board is prohibited.

The limitations contained in this AD supersede any conflicting basic airplane flight manual limitations."

AFM Revision: Model 747-400, -400D, and -400F

(c) For Model 747-400, -400D, and -400F series airplanes: Within 14 days after the effective date of this AD, concurrently perform the actions required by paragraphs (c)(1) and (c)(2) of this AD:

(1) Remove the AFM revision required by paragraph (c) of emergency AD 2002-18-52; and

(2) Revise the Limitations section of the FAA-approved AFM to include the following (this may be accomplished by inserting a copy of the AD into this AFM):

"Certificate Limitations

Fueling and use of the horizontal stabilizer tank (if installed) is prohibited if a placard prohibiting its use is installed.

The center wing tank (CWT) must contain a minimum of 17,000 pounds (7,700 kilograms) prior to engine start, if the CWT override/ jettison pumps are to be selected ON during flight.

The CWT fuel quantity indication system must be operative to dispatch with CWT mission fuel.

Both CWT override/jettison pump switches must be selected OFF at or before CWT fuel quantity reaches 7,000 pounds (3,200 kilograms), if CWT fuel quantity is less than 50,000 pounds (22,700 kilograms) prior to engine start. The CWT override pumps may be selected ON during stabilized cruise conditions. Both CWT override/jettison pump switches must be selected OFF at or before the CWT fuel quantity reaches 3,000 pounds (1,400 kilograms).

Note

With CWT override/jettison pumps selected OFF and CWT fuel quantity greater than 6,000 pounds (2,800 kilograms), the FUEL OVRD CTR L & R EICAS messages will be displayed. Do not accomplish the associated non-normal procedure.

Both CWT override/jettison pump switches must be selected OFF at or before CWT fuel quantity reaches 3,000 pounds

(1,400 kilograms), if CWT fuel quantity is greater than or equal to 50,000 pounds (22,700 kilograms) prior to engine start.

Both CWT override/jettison pumps must be selected OFF when either CWT override/jettison fuel pump low pressure light illuminates.

Warning

Do not reset a tripped fuel pump circuit breaker.

Warning

Do not cycle CWT override/jettison pump switches from ON to OFF to ON with any continuous low pressure indication present.

Note

The center wing tank may be emptied normally during an emergency fuel jettison.

Note

In a low fuel situation, both CWT override/jettison pumps may be selected ON and all CWT fuel may be used.

If a center wing tank pump fails with fuel in the center tank, accomplish the FUEL OVRD CTR L, R non-normal procedure.

If the main tanks are not full, the zero fuel gross weight of the airplane plus the weight of CWT tank fuel may exceed the maximum zero fuel gross weight by up to 7,000 pounds (3,200 kilograms) for takeoff, climb, cruise, descent, and landing, provided that the effects of balance (CG) have been considered.

When defueling any fuel tanks, the Fuel Pump Low Pressure indication lights must be monitored and the fuel pumps positioned to OFF at the first indication of fuel pump low pressure. Defueling with passengers on board is prohibited.

The limitations contained in this AD supersede any conflicting basic airplane flight manual limitations."

AFM Revision: Model 757

(d) For Model 757 series airplanes: Within 14 days after the effective date of this AD, concurrently perform the actions required by paragraphs (d)(1) and (d)(2) of this AD:

(1) Remove the AFM revision required by paragraph (d) of emergency AD 2002-18-52; and

(2) Revise the Limitations section of the FAA-approved AFM to include the following (this may be accomplished by inserting a copy of the AD into this AFM):

"Certificate Limitations

The center tank fuel pumps must be OFF for takeoff if center tank fuel is less than 5,000 pounds (2,300 kilograms) with the airplane readied for initial taxi.

Both center tank fuel pump switches must be selected OFF when center tank fuel quantity reaches approximately 1,000 pounds (500 kilograms) during climb, cruise, or descent. The center tank fuel pumps must be positioned OFF at the first indication of fuel pump low pressure.

The CWT fuel quantity indication system must be operative to dispatch with CWT mission fuel.

Warning

Do not reset a tripped fuel pump circuit breaker.

Note

The FUEL CONFIG light will illuminate when there is fuel in the center tank that exceeds 1,200 pounds (600 kilograms) and the center tank fuel pump switches are OFF. Do not accomplish the associated non-normal procedure prior to or during takeoff with less than 5,000 pounds (2,300 kilograms) of center tank fuel, unless there is an imbalance between main tanks or fuel is low in either main tank. After canceling the FUEL CONFIG light, monitor fuel quantity indications and accomplish the appropriate non-normal procedure if a main tank imbalance or main tank low fuel quantity occurs.

Note

In a low fuel situation, both center tank pumps may be selected ON and all center tank fuel may be used.

If the main tanks are not full, the zero fuel gross weight of the airplane plus the weight of center tank fuel may exceed the maximum zero fuel gross weight by up to 5,000 pounds (2,300 kilograms) for takeoff, climb, cruise, descent, and landing, provided that the effects of balance (CG) have been considered.

If a center tank fuel pump fails or indicates low pressure with fuel in the center tank, accomplish the FUEL PUMP non-normal procedure.

When defueling center or main wing tanks, the Fuel Pump Low Pressure indication lights must be monitored and the fuel pumps positioned to OFF at the first indication of fuel pump low pressure. Defueling with passengers on board is prohibited.

The limitations contained in this AD supersede any conflicting basic airplane flight manual limitations."

Placard Installation

(e) For all airplanes: Within 14 days after the effective date of this AD, install a placard that reads as follows (alternative placard wording may be used if approved by an appropriate FAA Principal Operations Inspector):

"AD 2002-19-52 fuel usage restrictions required."

(1) For Model 747-100, -200B, -200F, -200C, -100B, -300, -100B SUD, 747SR, and 747SP series airplanes: Install the placard on or adjacent to the flight engineer's fuel control panel.

(2) For all other airplanes: Install the placard adjacent to each pilot's primary flight display.

(f) For Model 747-400, -400D, and -400F series airplanes on which a horizontal stabilizer tank is installed: Within 14 days after the effective date of this AD, install a placard adjacent to each pilot's primary flight display that reads as follows (alternative placard wording may be used if approved by an appropriate FAA Principal Operations Inspector):

"Use of horizontal stabilizer tank is prohibited."

Terminating Actions

(g) For all airplanes: If all fuel pumps for the center wing tank, horizontal stabilizer tank, center auxiliary tanks, and auxiliary fuel tanks 1 and 4 on an airplane have been inspected using X-ray methods, and the wire bundle is properly routed in the pump since the most recent assembly of the end cap and motor-impeller housing--whether in manufacturing, after maintenance or inspection, or after overhaul--in accordance with the applicable service bulletin identified in Table 1 of this AD, the applicable AFM revision and placard required by paragraphs (a), (b), (c), (d), and (e) of this AD may be removed. Table 1 follows:

Table 1.--Service Bulletins

For--	Use the following service bulletin-
Model 737 series airplanes	Boeing Alert Service Bulletin 737- 28A1197, dated September 23, 2002.
Model 747 series airplanes	Boeing Alert Service Bulletin 747- 28A2248, dated September 23, 2002.
Model 757-200, -200PF, -200CB series airplanes.	Boeing Alert Service Bulletin 757- 28A0070, dated September 23, 2002.
Model 757-300 series airplanes.	Boeing Alert Service Bulletin 757- 28A0071, dated September 23, 2002.

(h) For Model 747-400, -400D, -400F series airplanes: If both horizontal stabilizer tank pumps have been inspected using X-ray methods to ensure that the wire bundle is properly routed in the pump since the most recent assembly of the end cap and motor-impeller housing--whether in manufacturing, after maintenance or inspection, or after overhaul--in accordance with Boeing Alert Service Bulletin 747-28A2248, dated September 23, 2002, and Crane Hydro-Aire Service Bulletin Crane Hydro-Aire Motor-Impeller-28-01, including Appendix A, dated September 17, 2002, the placard required by paragraph (f) of this AD is not required.

Part Installation

(i) Within 4 days after receipt of emergency AD 2002-18-52, no person may install on any airplane a fuel pump having a part number contained in Table 2 of this AD, unless the pump has been inspected to ensure that the wire bundle is properly routed in the pump since the most recent assembly of the end cap and motor-impeller housing-- whether in manufacturing, after maintenance or inspection, or after overhaul--in accordance with the applicable service bulletin identified in Table 1 of this AD. Table 2 follows:

Table 2.--Fleets and Part Numbers for Discrepant Fuel Pumps

Airplane	Hydro-Aire Part No.	Boeing Part No.
Model 737-600, -700, -700C, -800, and -900 series airplanes.	60-989100-4 60-755100-4	60B89004-14 60B92404-8
Model 747-100, -200B, -200F, -200C, SR, SP, -100B, -300, -100B SUD, 747SR, and 747SP series airplanes.	60-72301-4 60-75501-4 60-75503-4 60-755100-4 60-72101-4 60-98976-4	60B92603-418 60B92404-403 60B92404-404 60B92404-8 60B92603-26 60B89004-15
Model 747-400, -400D, and -400F series airplanes.	60-98976-4 60-72101-4	60B89004-15 60B92603-26
Model 757 series airplanes	60-989100-4 60-755100-4	60B89004-14 60B92404-8

(j) As of 14 days after the effective date of this AD, no person may install on any airplane, in any pump position, a fuel pump motor-impeller assembly having any part number unless the assembly has been inspected since the most recent assembly of the end cap motor-impeller housing--whether in manufacturing, after maintenance or inspection, or after overhaul--using X-ray methods to ensure that the wire bundle is properly routed in the pump in accordance with the applicable service bulletin listed in Table 1 of this AD.

(k) Inspection of a pump by Crane Hydro-Aire before the effective date of this AD is considered equivalent to an inspection performed in accordance with Crane Hydro-Aire Service Bulletin Crane Hydro-Aire Motor-Impeller-28-01, including Appendix A, dated September 17, 2002.

Alternative Methods of Compliance

(l)(1) 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 Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance and/or Operations Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 2002-18-52 are approved as alternative methods of compliance with paragraphs (a), (b), (c), and (d) of this AD.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be

obtained from the Seattle ACO.

Special Flight Permits

(m) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(n) Unless otherwise provided by this AD, the actions shall be done per Boeing Alert Service Bulletin 737-28A1197, dated September 23, 2002; Boeing Alert Service Bulletin 747-28A2248, dated September 23, 2002; Boeing Alert Service Bulletin 757-28A0070, dated September 23, 2002; Boeing Alert Service Bulletin 757-28A0071, dated September 23, 2002; and Crane Hydro-Aire Service Bulletin Crane Hydro-Aire Motor-Impeller-28-01, including Appendix A, dated September 17, 2002; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124- 2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(o) This amendment becomes effective on September 30, 2002.