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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-25746; Directorate Identifier 2006-NM-151-AD; Amendment 39-14750; AD 2006-18-11]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-200, -300, -400, and -500 Series Airplanes Equipped With an Auxiliary Fuel System Installed in Accordance With Supplemental Type Certificate (STC) SA83NE, SA1078NE, SA725NE, ST00040NY, or ST01337NY

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 737-200, -300, -400, and -500 series airplanes equipped with an auxiliary fuel system installed in accordance with STC SA83NE, SA1078NE, SA725NE, ST00040NY, or ST01337NY. This AD requires a one-time deactivation of the auxiliary fuel system, repetitive venting of the auxiliary fuel tanks, and revising the Limitations section of the airplane flight manual to limit the maximum cargo weight. This AD results from a re-evaluation of the floor structure and cargo barriers conducted by the STC holder. We are issuing this AD to prevent structural overload of the auxiliary fuel tank support structure, which could cause the floor beams to fail and resultant damage to the primary flight controls and the auxiliary power unit fuel lines that pass through the floor beams, and consequent loss of control of the airplane. We are also issuing this AD to prevent structural overload of the cargo barriers, which could cause the barriers to fail, allowing the cargo to shift, resulting in possible damage to the auxiliary fuel tanks, residual fuel leakage, and consequent increased risk of a fire.

DATES: This AD becomes effective September 27, 2006.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of September 27, 2006.

We must receive comments on this AD by November 13, 2006.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, room PL-401, Washington, DC 20590.
- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. Contact PATS Aircraft, LLC, Product Support, 21652 Nanticoke Avenue, Georgetown, Delaware 19947, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Jon Hjelm, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7323; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

PATS Aircraft (holder of Supplemental Type Certificates (STC) SA83NE, SA1078NE, SA725NE, ST00040NY, and ST01337NY) notified us that it has determined that Boeing Model 737-200, -300, -400, and -500 series airplanes equipped with an auxiliary fuel tank system installed by STC SA83NE, SA1078NE, SA725NE, ST00040NY, or ST01337NY, have insufficient structural strength in the auxiliary fuel tank support structure. The STC holder has also determined that the cargo barriers have insufficient structural strength if subjected to emergency landing loads with the cargo load weights listed in the existing airplane flight manual (AFM) supplements. These determinations were based on a new structural analysis resulting from a re-evaluation of the floor structure and cargo barriers conducted by the STC holder. Structural overload of the auxiliary fuel tank support structure could cause the floor beams to fail, resulting in damage to the primary flight controls and the auxiliary power unit (APU) fuel lines that pass through the floor beams, and consequent loss of control of the airplane. Structural overload of the cargo barriers could cause the barriers to fail, allowing the cargo to shift, resulting in possible damage to the auxiliary fuel tanks, residual fuel leakage, and consequent increased risk of a fire.

Relevant Service Information

We have reviewed the PATS Aircraft service bulletins listed in the table below. These service bulletins describe procedures for deactivating the auxiliary fuel system, which, for certain airplanes, includes installing new cargo loading weight limit and "INOP" placards, depending on the airplane configuration. The service bulletins also describe procedures for venting any residual air pressure from the auxiliary fuel tanks following each flight. For certain airplanes, paragraph I.D. ("Description") of the service bulletins describes limiting the maximum cargo weight (as specified on the new cargo weight placards) in the forward and aft cargo compartments, as applicable, depending on the STC configuration of the airplane.

Table - Applicable Service Bulletins

For Model -	Having serial number(s) (S/N) -	STC -	Use PATS Aircraft Service Bulletin -
737-200 series airplanes	22431 and 22628	SA83NE	SA83NE-28-SB-002_IR, dated June 7, 2006
737-200 series airplanes	22600	SA1078NE	SA1078NE-28-SB-005_A, Revision A, dated June 21, 2006

737-200, -300, -400, and -500 series airplanes	23800, 22620, 23124, 23468, 26333, 26307, 27456, 27426, and 27906	SA725NE	SA725NE-28-SB-007_B, Revision B, dated July 27, 2006
737-500 series airplanes	24970	ST00040NY	ST00040NY-28-SB-003_IR, dated June 7, 2006
737-500 series airplanes	28866	ST01337NY	ST01337NY-28-SB-002_IR, dated June 7, 2006

We have also reviewed the PATS Aircraft AFM supplements to the Limitations section of the applicable Boeing AFMs, which are listed in the following table. These AFM supplements provide revised maximum cargo weight limits.

Table - AFM Supplements for Revised Maximum Cargo Weight Limits

For Model -	Having S/N(s) -	STC -	STC configuration(s) -	Use PATS Aircraft AFM Supplement -
737-200 series airplanes	23124	SA725NE	2	148, dated May 31, 2006
737-200 series airplanes	22620 and 23468	SA725NE	3 and 8	149, Revision A, dated August 11, 2006
737-200 series airplanes	22600	SA1078NE	3 Tank forward	152, dated May 31, 2006
737-200 series airplanes	22431 and 22628	SA83NE	2	155, dated May 31, 2006
737-300 series airplanes	27456, 26307, and 26333	SA725NE	1 and 6	147, dated May 31, 2006
737-300 series airplanes	23800	SA725NE	7	151, dated May 31, 2006
737-400 and -500 series airplanes	27906 and 27426	SA725NE	4 and 5	150, dated May 31, 2006
737-500 series airplanes	28866	ST01337NY	Aft 3-tank	153, Revision A, dated August 3, 2006
737-500 series airplanes	24970	ST00040NY	7	154, dated May 31, 2006

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design. For this reason, we are issuing this AD to prevent structural overload of the auxiliary fuel tank support structure, which could cause the floor beams to fail and resultant damage to the primary flight controls and the APU fuel lines that pass through the floor beams, and consequent loss of control of the airplane. We are also issuing this AD to prevent structural overload of the cargo barriers, which could cause the barriers to fail, allowing the cargo to shift, resulting in

possible damage to the auxiliary fuel tanks, residual fuel leakage, and consequent increased risk of a fire. This AD requires accomplishing the actions specified in the service information described previously, except as discussed under "Difference Between the AD and the Service Bulletins."

Difference Between the AD and the Service Bulletins

The PATS Aircraft service bulletins do not specify a compliance time for deactivating the auxiliary fuel system or implementing the new cargo weight limits. In developing an appropriate compliance time for those actions in this AD, we considered the degree of urgency associated with the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the deactivation (3 work hours) and AFM revision. In light of all of these factors, we find that a 30-day compliance time represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety.

Interim Action

We consider this AD interim action. If final action is later identified, we may consider further rulemaking then.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists to make this AD effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed in the ADDRESSES section. Include "Docket No. FAA-2006-25746; Directorate Identifier 2006-NM-151-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-18-11 Boeing: Amendment 39-14750. Docket No. FAA-2006-25746; Directorate Identifier 2006-NM-151-AD.

Effective Date

(a) This AD becomes effective September 27, 2006.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Boeing Model 737-200, -300, -400, and -500 series airplanes, certificated in any category; equipped with an auxiliary fuel system installed in accordance with Supplemental Type Certificate (STC) SA83NE, SA1078NE, SA725NE, ST00040NY, or ST01337NY; having serial numbers (S/N) listed in Table 1 of this AD.

Table 1 – Applicability

For Model -	Having S/N(s) -	As identified in PATS Aircraft Service Bulletin -
737-200 series airplanes	22431 and 22628	SA83NE-28-SB-002_IR, dated June 7, 2006
737-200 series airplanes	22600	SA1078NE-28-SB-005_A, Revision A, dated June 21, 2006
737-200, -300, -400, and -500 series airplanes	23800, 22620, 23124, 23468, 26333, 26307, 27456, 27426, and 27906	SA725NE-28-SB-007_B, Revision B, dated July 27, 2006
737-500 series airplanes	24970	ST00040NY-28-SB-003_IR, dated June 7, 2006
737-500 series airplanes	28866	ST01337NY-28-SB-002_IR, dated June 7, 2006

Unsafe Condition

(d) This AD results from a re-evaluation of the floor structure and cargo barriers conducted by the STC holder. We are issuing this AD to prevent structural overload of the auxiliary fuel tank support structure, which could cause the floor beams to fail and resultant damage to the primary flight controls and the auxiliary power unit fuel lines that pass through the floor beams, and consequent loss of control of the airplane. We are also issuing this AD to prevent structural overload of the cargo barriers, which could cause the barriers to fail, allowing the cargo to shift, resulting in possible damage to the auxiliary fuel tanks, residual fuel leakage, and consequent increased risk of a fire.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Service Bulletin References

(f) The term "service bulletin," as used in this AD, means the Part IV "Accomplishment Instructions," and Part V "Maintenance Requirements," of the applicable PATS Aircraft service bulletin identified in Table 1 of this AD.

Deactivate the Auxiliary Fuel System/Revise the Maximum Cargo Weight Limits

(g) Within 30 days after the effective date of this AD: Do the actions in paragraphs (g)(1) and (g)(2) of this AD.

(1) Deactivate the auxiliary fuel system by doing all of the actions specified in Part IV of the applicable service bulletin.

(2) Revise the Limitations section of the applicable Boeing airplane flight manual (AFM) to include revised maximum cargo weight limits specified in the applicable PATS Aircraft AFM supplement identified in Table 2 of this AD. Operate the airplane according to the limitations in the applicable AFM supplement.

Table 2 - AFM Supplements for Revised Maximum Cargo Weight Limits

For Model -	Having S/N(s) -	STC -	STC configuration(s) -	Use PATS Aircraft AFM Supplement -
737-200 series airplanes	23124	SA725NE	2	148, dated May 31, 2006
737-200 series airplanes	22620 and 23468	SA725NE	3 and 8	149, Revision A, dated August 11, 2006
737-200 series airplanes	22600	SA1078NE	3 Tank forward	152, dated May 31, 2006
737-200 series airplanes	22431 and 22628	SA83NE	2	155, dated May 31, 2006
737-300 series airplanes	27456, 26307, and 26333	SA725NE	1 and 6	147, dated May 31, 2006
737-300 series airplanes	23800	SA725NE	7	151, dated May 31, 2006
737-400 and -500 series airplanes	27906 and 27426	SA725NE	4 and 5	150, dated May 31, 2006
737-500 series airplanes	28866	ST01337NY	Aft 3-tank	153, Revision A, dated August 3, 2006
737-500 series airplanes	24970	ST00040NY	7	154, dated May 31, 2006

Repetitive Venting of the Built-Up Pressure in the Auxiliary Fuel Tanks

(h) After deactivating the auxiliary fuel system as specified in paragraph (g) of this AD: Following each flight, vent the auxiliary fuel tanks by doing all of the actions specified in paragraph A. of Part V of the applicable service bulletin.

Special Flight Permits

(i) 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 airplane can be modified, provided the airplane is operated with the auxiliary fuel tanks empty of useable fuel.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, New York Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Material Incorporated by Reference

(k) You must use the PATS Aircraft service bulletins specified in Table 3 of this AD and the PATS Aircraft airplane flight manual supplements specified in Table 4 of this AD, as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise.

Table 3 – Service Bulletins Incorporated by Reference

PATS Aircraft Service Bulletin -	Revision Level -	Dated -
SA1078NE-28-SB-005_A	A	June 21, 2006
SA725NE-28-SB-007_B	B	July 27, 2006
SA83NE-28-SB-002_IR	Original	June 7, 2006
ST00040NY-28-SB-003_IR	Original	June 7, 2006
ST01337NY-28-SB-002_IR	Original	June 7, 2006

Table 4 - Airplane Flight Supplements Incorporated by Reference

PATS Aircraft Airplane Flight Manual Supplement -	Revision Level -	Dated -	To the -
147	Original	May 31, 2006	Boeing 737-300 Airplane Flight Manual
148	Original	May 31, 2006	Boeing 737-200 Airplane Flight Manual
149	A	August 11, 2006	Boeing 737-200 Airplane Flight Manual

150	Original	May 31, 2006	Boeing 737-400/500 Airplane Flight Manual
151	Original	May 31, 2006	Boeing 737-300 Airplane Flight Manual
152	Original	May 31, 2006	Boeing 737-200 Airplane Flight Manual
153	A	August 3, 2006	Boeing 737-500 Airplane Flight Manual
154	Original	May 31, 2006	Boeing 737-500 Airplane Flight Manual
155	Original	May 31, 2006	Boeing 737-200 Airplane Flight Manual

The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact PATS Aircraft, LLC, Product Support, 21652 Nanticoke Avenue, Georgetown, Delaware 19947, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 23, 2006.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E6-14618 Filed 9-11-06; 8:45 am]