

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2011-1414; Directorate Identifier 2011-NM-227-AD]

RIN 2120-AA64

**Airworthiness Directives; Cessna Aircraft Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Cessna Aircraft Company Model 560XL airplanes. This proposed AD was prompted by reports of jammed or stiff rudder control due to water freezing on the rudder bias cables and pulleys of the stinger. This proposed AD would require modification of the drain installation of the tailcone stinger on the aft canted bulkhead, inspections for drain holes in the forward and aft frames, and modification of the drain holes. We are proposing this AD to prevent ice accumulation on the cables and pulleys of the stinger, which could result in jamming of the rudder and consequent reduced controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by February 13, 2012.

**ADDRESSES:** You may send comments using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** (202) 493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Cessna Aircraft Co., P.O. Box 7706, Wichita, Kansas 67277; telephone (316) 517-6215; fax (316) 517-5802; email [citationpubs@cessna.textron.com](mailto:citationpubs@cessna.textron.com); Internet <https://www.cessnasupport.com/newlogin.html>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this

material at the FAA, call (425) 227-1221.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** David Fairback, Aerospace Engineer, Mechanical Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: (316) 946-4154; fax: (316) 946-4107; email: [david.fairback@faa.gov](mailto:david.fairback@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2011-1414; Directorate Identifier 2011-NM-227-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

We have received reports of jammed or stiff rudder control due to water freezing on the rudder bias cables and pulleys of the stinger. The cause of this is attributed to a large amount of water entering the stinger and pooling at the lowest point due to inadequate drainage. This water sprays onto the rudder bias cables and pulleys due to the inflow of air into the stinger. Therefore, as the airplane climbs to temperatures below 32 degrees Fahrenheit the water freezes on the cables, pulleys, and mounting brackets. The ice acts as an adhesive, which

prevents the pulleys from rotating and the cables from sliding on the pulleys. These conditions, if not corrected, could result in jamming of the rudder and consequent reduced controllability of the airplane.

**Relevant Service Information**

We reviewed Cessna Service Bulletin SB560XL-53-16, dated October 4, 2011, including Service Bulletin Supplemental Data SB560XL-53-16, Revision A, dated October 20, 2011, which describes procedures for modifying the drain installation of the tailcone stinger on the aft canted bulkhead. The modification includes installing a drain and rubber seals to reduce the amount of water entering the stinger and improve drainage. That service bulletin recommends prior or concurrent accomplishment of Cessna Alert Service Letter ASL560XL-53-08, dated January 21, 2011, which describes procedures for modification of the drain holes. The modification includes inspections for a missing drain hole and drilling a larger drain hole if there is not a number 7 (0.201 inch-diameter) drain hole at that location, sealing existing drain holes in the tailcone stinger, or adding drain holes in the aft canted bulkhead.

**FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of this same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and Service Information."

**Differences Between the Proposed AD and Service Information**

Cessna Service Bulletin SB560XL-53-16, dated October 4, 2011, specifies a compliance time of "within 1,200 flight hours or 18 months from the date of receipt, whichever occurs first," for the modification of the stinger drain installation. Cessna Alert Service Letter ASL560XL-53-08, dated January 21, 2011, specifies a compliance time of "within 90 flight hours or 90 days from the date of receipt, whichever occurs first," for modification of the drain holes. However, this proposed AD would require accomplishment of the modification of the stinger drain installation within 800 flight hours or 12 months after the effective date of this

AD, whichever occurs first; and prior or concurrent accomplishment of the modification of the drain holes. We find that these compliance times represent appropriate intervals of time for affected airplanes to continue to operate without compromising safety.

Cessna Service Bulletin SB560XL–53–16, dated October 4, 2011; and Cessna Alert Service Letter ASL560XL–53–08, dated January 21, 2011; both recommend submitting certain maintenance information to the manufacturer, but this proposed AD does not include that requirement.

### Costs of Compliance

We estimate that this proposed AD affects 475 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification of stinger drain installation .....	10 work-hours × \$85 per hour = \$850 .....	\$489	\$1,339	\$636,025
Prior/concurrent modification of drain holes ...	5 work-hours × \$85 per hour = \$425 .....	255	680	323,000

### 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 determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed 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),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

### List of Subjects in 14 CFR Part 39

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

### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Cessna Aircraft Company:** Docket No. FAA–2011–1414; Directorate Identifier 2011–NM–227–AD.

#### (a) Comments Due Date

We must receive comments by February 13, 2012.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to Cessna Aircraft Company Model 560XL airplanes; certificated in any category; serial numbers –5002 through –5372 inclusive, –5501 through –5830 inclusive, –6002 through –6080 inclusive, and –6082 through –6086 inclusive.

#### (d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 53: Fuselage.

#### (e) Unsafe Condition

This AD was prompted by reports of jammed or stiff rudder control due to water freezing on the rudder bias cables and pulleys of the stinger. We are issuing this AD to prevent ice accumulation on the cables and pulleys of the stinger, which could result

in jamming of the rudder and consequent reduced controllability of the airplane.

#### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

#### (g) Modification of the Drain Installation

Within 800 flight hours or 12 months after the effective date of this AD, whichever occurs first: Modify the drain installation of the tailcone stinger on the aft canted bulkhead (*i.e.*, install a drain and rubber seals), in accordance with the Accomplishment Instructions of Cessna Service Bulletin SB560XL–53–16, dated October 4, 2011.

#### (h) Modification of the Drain Holes

For airplanes identified in Cessna Alert Service Letter ASL560XL–53–08, dated January 21, 2011: Prior to or concurrently with the modification required by paragraph (g) of this AD, modify the drain holes, including inspecting for a missing drain hole and, before further flight, drilling a larger drain hole as applicable; in accordance with the Accomplishment Instructions of Cessna Alert Service Letter ASL560XL–53–08, dated January 21, 2011.

**Note 1:** After accomplishing the actions required by paragraphs (g) and (h) of this AD, maintenance and/or preventative maintenance under 14 CFR part 43 is permitted provided the maintenance does not result in changing the AD-mandated configuration (reference 14 CFR 39.7).

#### (i) No Reporting

Although Cessna Service Bulletin SB560XL–53–16, dated October 4, 2011; and Cessna Alert Service Letter ASL560XL–53–08, dated January 21, 2011; both specify to submit certain maintenance information to the manufacturer, this AD does not include that requirement.

#### (j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita Aircraft Certification Office (ACO), ACE–115W, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District

Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

#### (k) Related Information

(1) For more information about this AD, contact David Fairback, Aerospace Engineer, Mechanical Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; phone: (316) 946-4154; fax: (316) 946-4107; email: [david.fairback@faa.gov](mailto:david.fairback@faa.gov).

(2) For service information identified in this AD, contact Cessna Aircraft Co., P.O. Box 7706, Wichita, Kansas 67277; telephone (316) 517-6215; fax (316) 517-5802; email [citationpubs@cessna.textron.com](mailto:citationpubs@cessna.textron.com); Internet <https://www.cessnasupport.com/newlogin.html>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call (425) 227-1221.

Issued in Renton, Washington, on December 23, 2011.

**John P. Piccola,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2011-33563 Filed 12-29-11; 8:45 a.m.]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2011-1411; Directorate Identifier 2011-NM-074-AD]

RIN 2120-AA64

#### Airworthiness Directives; The Boeing Company Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Model 737 airplanes. This proposed AD would incorporate design changes to improve the reliability of the cabin altitude warning system by requiring installation of a redundant switch of the cabin altitude pressure, replacing the aural warning module (AWM) with a new or reworked AWM, changing certain wire bundles, and connecting certain previously capped and stowed wires, as necessary. This proposed AD,

for certain airplanes, would also require modifying the instrument panels, installing light assemblies, modifying the wire bundles, and installing a new circuit breaker, as necessary. This proposed AD was prompted by a report of a lack of cabin pressurization event caused by the flightcrew not receiving an aural warning because of the failure of the cabin altitude pressure switch. We are proposing this AD to prevent failure of the flightcrew to recognize and react to a lack of cabin pressurization, which could result in incapacitation of the flightcrew due to hypoxia (lack of oxygen in the body), and consequent loss of control of the airplane.

**DATES:** We must receive comments on this proposed AD by February 13, 2012.

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** (202) 493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Boeing service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone (206) 544-5000, extension 1; fax (206) 766-5680; email [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>. For BAE Systems service information identified in this proposed AD, contact BAE Systems, Attention: Commercial Product Support, 600 Main Street, Room S18C, Johnson City, NY 13790-1806; telephone (607) 770-3084; fax (607) 770-3015; email [CS-Customer.Service@baesystems.com](mailto:CS-Customer.Service@baesystems.com); Internet <http://www.baesystems-ps.com/customersupport>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call (425) 227-1221.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through

Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT:

Jeffrey Palmer, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6481; fax: (425) 917-6590; email: [jeffrey.palmer@faa.gov](mailto:jeffrey.palmer@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2011-1411; Directorate Identifier 2011-NM-074-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

We have received a report from an operator of an event in which the flightcrew was not aware of cabin depressurization. The flightcrew also were not aware that passenger oxygen masks had deployed until they were notified by a member of the cabin crew. Further investigations revealed that the flightcrew did not receive an aural warning because of the failure of the cabin altitude pressure switch at 10,000 feet. This condition, if not corrected, could result in failure of the flightcrew to recognize and react to a lack of cabin pressurization, which could result in incapacitation of the flightcrew due to hypoxia (lack of oxygen in the body), and consequent loss of control of the airplane.

#### Relevant Service Information

We reviewed the following service information: