
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Boeing 727 Series Aeroplanes

AD/B727/216
Auxiliary Fuel Tanks
1/2009

Applicability: This AD applies to the following aeroplanes fitted with the Auxiliary tank STC(s) listed in Table 1 of this AD.

Aeroplanes	Auxiliary tank STC(s)
Boeing Model 727 series aeroplanes	SA62NE, SA392NE, SA530NE
Boeing Model 727-100 series aeroplanes	SA62NE, SA387NE, SA392NE, SA530NE, ST00466NY
Boeing Model 727-200 series aeroplanes	SA84NE, SA387NE, SA450NE, SA496NE

Requirement:

1. Submit a report to the Manager, Systems and New Technologies, Airworthiness Engineering Group CASA, Fax (02) 6217 1914.

The report must include the following information:

- (a) The aeroplane registration and auxiliary tank STC number installed.
- (b) The usage frequency in terms of total number of flights per year and total number of flights per year for which the auxiliary tank is used.

2. Deactivate the auxiliary fuel tanks, in accordance with a deactivation procedure approved by CASA. Any auxiliary tank component that remains on the aeroplane must be secured and must have no effect on the continued operational safety and airworthiness of the aeroplane. Deactivation must not result in the need for additional instructions for continued airworthiness.

Note 1: Appendix A of this AD provides criteria that should be included in the deactivation procedure. The proposed deactivation procedures should be submitted to the Manager, Systems and New Technologies, as soon as possible to ensure timely review and approval.

Note 2: FAA AD 2008-22-01 Amdt 39-15696 dated 9 October 2008 refers.

Boeing 727 Series Aeroplanes

AD/B727/216 (continued)

Compliance: For Requirement 1 - Within 45 days after the effective date of this AD.

For Requirement 2 - Before 16 December 2009.

This Airworthiness Directive becomes effective on 15 January 2009.

Background: This AD requires deactivation of PATS Aircraft, LLC, auxiliary fuel tanks. This AD results from fuel system reviews conducted by the manufacturer, which identified unsafe conditions for which the manufacturer has not provided corrective actions. The issuing of this AD is intended to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapours, could result in fuel tank explosions and consequent loss of the aeroplane.



James Coyne
Delegate of the Civil Aviation Safety Authority

27 November 2008

Boeing 727 Series Aeroplanes

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AD/B727/216 Appendix A

Auxiliary Fuel Tanks

1/2009

Deactivation Criteria

The auxiliary fuel tank deactivation procedure as detailed in Requirement 2 of this AD should address the following actions.

1. Permanently drain auxiliary fuel tanks, and clear them of fuel vapours to eliminate the possibility of out-gassing of fuel vapours from the emptied auxiliary tank.
2. Disconnect all electrical connections from the fuel quantity indication system (FQIS), fuel pumps if applicable, float switches, and all other electrical connections required for auxiliary tank operation, and stow them at the auxiliary tank interface.
3. Disconnect all pneumatic connections if applicable, cap them at the pneumatic source, and secure them.
4. Disconnect all fuel feed and fuel vent plumbing interfaces with aeroplane original equipment manufacturer (OEM) tanks, cap them at the aeroplane tank side, and secure them in accordance with a method approved by the CASA; one approved method is specified in AC 25-8 Auxiliary Fuel System Installations. In order to eliminate the possibility of structural deformation during cabin decompression, leave open and secure the disconnected auxiliary fuel tank vent lines.
5. Pull and collar all circuit breakers used to operate the auxiliary tank.
6. Revise the weight and balance document, if required, and obtain CASA approval.
7. Amend the applicable sections of the applicable aeroplane flight manual (AFM) to indicate that the auxiliary fuel tank is deactivated. Remove auxiliary fuel tank operating procedures to ensure that only the OEM fuel system operational procedures are contained in the AFM. Amend the Limitations Section of the AFM to indicate that the AFM Supplement for the STC is not in effect. Place a placard in the flight deck indicating that the auxiliary tank is deactivated. The AFM revisions specified in this paragraph may be accomplished by inserting a copy of this AD into the AFM.
8. Amend the applicable sections of the applicable aeroplane maintenance manual to remove auxiliary tank maintenance procedures.
9. After the auxiliary fuel tank is deactivated, accomplish procedures such as leak checks and pressure checks deemed necessary before returning the aeroplane to service. These procedures must include verification that the aeroplane FQIS and fuel distribution systems have not been adversely affected.
10. Revise the instructions for continued airworthiness, as required, after deactivation.

Boeing 727 Series Aeroplanes

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11. Include with the operator's proposed procedures any relevant information or additional steps that are deemed necessary by the operator to comply with the deactivation and return the aeroplane to service.