
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/B727/213

Auxiliary Fuel Tanks

9/2008

Applicability: Model 727 aeroplanes equipped with auxiliary fuel tanks installed in accordance with specified United States Federal Aviation Administration (FAA) Supplemental Type Certificates (STC) as follows:

Aeroplane Series

Auxiliary Tank STC

727-100

SA2970WE, SA3674WE, SA3157WE, SA3319WE,
SA3559WE, SA2734WE, SA3920NM, SA3810WE,
SA1979NM, SA1398NM and SA3483WE

727-200

SA3065WE and SA1051NW

Requirement: Deactivate the auxiliary fuel tanks, in accordance with an approved deactivation procedure. 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 may not result in the need for additional instructions for continued airworthiness.

Note 1: Appendix A of this Directive provides criteria that should be included in the deactivation procedure.

Note 2: FAA AD 2008-12-03 Amdt 39-15546 refers.

Compliance: On or before 16 December 2008.

This Airworthiness Directive becomes effective on 28 August 2008.

Boeing 727 Series Aeroplanes

AD/B727/213 (continued)

Background: This Directive requires deactivation of Rogerson Aircraft Corporation auxiliary fuel tanks. The Directive results from fuel system reviews conducted by the manufacturer, which identified potential unsafe conditions for which the manufacturer has not provided corrective actions and is issued 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

16 July 2008

Boeing 727 Series Aeroplanes

AD/B727/213 (continued)

Appendix A - Auxiliary Fuel Tank Deactivation Criteria

The auxiliary fuel tank deactivation procedure required by this Directive 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.

Note: If applicable, removing the bladder might help eliminate out-gassing.

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 an approved method; one approved method is specified in United States Federal aviation administration advisory Circular AC 25-8 *Fuel Tank Systems 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 aircraft 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 Supplemental Type Certificate 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 Directive 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 fuel quantity indication system and fuel distribution systems have not been adversely affected.

10. 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.