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 39.1 (1) of CAR 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.

Learjet 45 Series Aeroplanes

AD/LJ45/3 Ice and Rain Protection 6/2002

Applicability: Learjet 45 series aeroplanes as listed by serial number in Bombardier (Learjet) Service Bulletin (SB) A45-30-2, and not incorporating the requirements of Section 2 Accomplishment Instructions of Bombardier (Learjet) SB A45-30-2.

Requirement:

1. Flight Manual: Revise the limitations section of the FAA approved Aircraft flight manual (AFM) by replacing the existing information in the "TYPE OF OPERATION" section with the following:

   "This airplane is approved for:

   - VFR (Visual)
   - IFR (Instrument)
   - Day
   - Night

   Flight into icing conditions is prohibited. If icing conditions are encountered, comply with the Inadvertent Icing Encounter procedure, Section IV. Fly out of icing conditions as soon as possible.

   Icing conditions exist when outside air temperature (OAT) on the ground and for takeoff is 10°C (50°F) or below, or the static air temperature (SAT) in flight is 10°C (50°F) to -40°C (-40°F), and visible moisture in any form is present (such as clouds, fog with visibility of one mile (1.6 km) or less, rain, snow, sleet, or ice crystals).

   Icing conditions also exist when the OAT on the ground and for takeoff is 10°C (50°F) or below when operating on ramps, taxiways, or runways where surface snow, ice, standing water, or slush may be ingested by the engines, or freeze on engines, nacelles, or engine sensor probes."

2. Inspection: Inspect the anti-ice manifold assembly in accordance with Bombardier (Learjet) SB A45-30-02.

3. Replacement: Replace the anti-ice manifold assembly in accordance with Bombardier (Learjet) SB A45-30-02.

Learjet 45 Series Aeroplanes

AD/LJ45/3 (continued)

4. Maintenance Program: Amend the Learjet Model 45 Maintenance Manual to reflect that detailed in Temporary Revisions 4-2,5-2, and 30-1 dated 2 January 2001.

Note 1: FAA AD 2001-03-05 refers.

Note 2: Insertion of Learjet 45 Temporary Flight Manual Change (TFM) TFM 2000-16, dated January 8, 2001, is acceptable for the requirements of Item 1 of requirements.

Note 3: Compliance with Bombardier (Learjet) Service Bulletin (SB) A45-30-2 is terminating action for this Directive.

Compliance: Effective 13 June 2002.

1. Prior to 15 June 2002.

2. Within 25 hours Time in Service (TIS) from the effective date of this Directive.

3. Within 25 hours Time in Service (TIS) from the effective date of this Directive.

4. Within 25 hours Time in Service (TIS) from the effective date of this Directive.

This Airworthiness Directive becomes effective on 13 June 2002.

Background: Failure of the splitter contained with the anti-ice manifold has led to blocking of the anti-ice system ducts. This degrades the anti-ice capacity of the aeroplane. This Directive introduces a temporary flight manual change to not allow operation of the aeroplane in icing conditions until replacement of the manifold and a check of the anti-ice system ducts for blockage is carried out.

James Coyne
Delegate of the Civil Aviation Safety Authority

3 May 2002