# **AIRWORTHINESS DIRECTIVE**

On the effective date specified below, and for the reasons set out in the background section, this AD is revoked by CASA ADCX 014/13.

### **Instruments and Automatic Pilots**

AD/INST/9 Amdt 6	Instruments in IFR Aircraft	16/2013

Requirement: CANCELLED.

This AD is cancelled on 31 July 2013.

Background: The requirements of this AD have been transitioned to Civil Aviation Order 100.5.

#### (Civil Aviation Safety Regulations 1998), PART 39 - 107

# **COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY** SCHEDULE OF AIRWORTHINESS DIRECTIVES

# **AIRWORTHINESS DIRECTIVE**

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/INST/9 Amdt 5 and issues the following AD under subregulation 39.1 (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.

## Instruments and Automatic Pilots

AD/INST/9 Amdt 6	Instruments in IFR Aircraft - Test Requirements 8/2003 DM	
Applicability:	Aircraft instruments installed in aircraft which are aircraft approved for IFR operations.	
Requirement:	An operator must elect one of the following options:	
	1. Pressure altimeters - Test the altimeter in accordance with the requirements of USA Federal Aviation Regulations Part 43 Appendix E. or	
	<ol> <li>a. Check the integrity of all aircraft instruments and instrument systems in accordance with the requirements previously specified in AD/INST/9 Amdt 5. and</li> </ol>	
	b. Verify the integrity of the aircraft pitot and static systems in accordance with the requirements previously specified in AD/INST/9 Amdt 5.	
Compliance:	For Requirement 1: At intervals not to exceed 24 months, or	
	For Requirement 2 a. and b:	
	(a) At intervals not to exceed three years, or	
	(b) At the intervals approved in accordance with a System of Maintenance for the aircraft pursuant to Civil Aviation Regulation 42M	
	This Amendment becomes effective on 16 July 2003.	
Background:	Amendment 4 was issued to clarify applicability and remove superseded data.	
	Amendment 5 was issued to correct reference data and to delete superseded material.	
	This amendment is issued to align the maintenance and interval requirements to those being introduced with the issue of CASR Part 43 and Part 91.	

## COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

### **Instruments and Automatic Pilots**

AD/INST/9 Amdt 6 (continued)

The requirements and intervals of AD/INST/9 Amdt 5 have been retained for those operators who wish to continue to maintain their aircraft instruments in accordance with the requirements of Amdt 5 and intervals in the interim period until the CASR Part 43 and Part 91 come into effect.

Jim Coyne Delegate of the Civil Aviation Safety Authority

26 June 2003



## COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

### **Instruments and Automatic Pilots**

NOTE: The previous version of AD/INST/9 Amdt 5 has been included for reference.

## AD/INST/9 Amdt 5 Instruments in IFR Aircraft - Test Requirements 7/92

- Applicability: Aircraft instruments installed in aircraft which are aircraft approved for IFR operations.
- Requirement: 1. The integrity of all aircraft instruments and instrument systems shall be checked and the accuracy of instruments shall be tested to ensure compliance with the following:

a. Pressure altimeters - the requirements of USA Federal Aviation Regulations Part 43 Appendix E.

b. Compasses - the requirements of Civil Aviation Orders Section 108.6.

c. Airspeed Indicators, Vertical Speed Indicators, Outside Air Temperature Indicators and all mandatory engine instruments - the aircraft or aircraft component manufacturer's published data applicable to test and calibration of the particular instrument.

d. Fuel Quantity Indicating Systems - the aircraft or system manufacturers published data applicable to test and calibration of the systems except that the tolerances specified in Civil Aviation Orders Section 108.56 paragraph 3.4 shall not be exceeded and the placarding requirements of that paragraph also apply where appropriate.

e. Instruments incorporating a gyroscope -

(1) Where the pilot in command (being the holder of an instrument rating) has specifically checked the operation of the instruments during the last flight before the actions required by this AD and has certified on the maintenance release that there were no anomalies in gyro instrument indications or functions, necessary maintenance only is mandatory.

(2) If the determination above has not been made or there are any anomalies in operation, a test procedure of such nature as will determine that the instrument complies with the aircraft or aircraft component manufacturer's accuracy requirements.

f. All other instruments - a test procedure of such nature as will determine that the instrument complies with the aircraft or aircraft component manufacturer's accuracy requirements.

#### (Civil Aviation Safety Regulations 1998), PART 39 - 107

#### COMMONWEALTH OF AUSTRALIA

# CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

### **Instruments and Automatic Pilots**

AD/INST/9 Amdt 5 (superseded) (continued)

2. Verify the integrity of the aircraft pitot and static systems by performing the following checks and tests:

a. Check each system for freedom from moisture, restrictions, deterioration and airframe imperfections that may affect the systems accuracy.

B. Test each system to ensure that leakage is within the aircraft manufacturer's limits. Where no aircraft manufacturer's limits have been published the following applies:

(1) Static Systems Unpressurised Aircraft - evacuate the static system to a pressure differential of approximately 3.4Kpa (1 inch of mercury or 1000 feet change in altitude). Without additional pumping for a period of 1 minute, the loss of indicated altitude must not exceed 100 feet.

(2) Static Systems Pressurised Aircraft , evacuate the static system until a pressure differential equivalent to the maximum cabin pressure differential for which the aircraft is certificated is achieved. Without additional pumping for a period of 1 minute, the loss of indicated altitude must not exceed 2 percent of the altitude equivalent to the maximum cabin differential pressure or 100 feet, whichever is the greater.

(3) Pitot Systems - apply a pressure to the pitot system of approximately 3.4Kpa (1 inch of mercury or 140 knots). Without additional pumping for a period of 10 seconds there shall be no decrease in this pressure.

Compliance: For all affected instruments and pitot static systems:

1. (a) At intervals not to exceed three years, or

(b) At the intervals approved in accordance with a System of Maintenance for the aircraft pursuant to Civil Aviation Regulation 42M.

2. Before an aircraft not presently approved for IFR operations is approved for such operations.

Background: Amendment 4 was issued to clarify applicability and remove superseded data. This amendment is issued to correct reference data and to delete superseded material.