
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.

Instruments and Automatic Pilots

AD/INST/53

Shadin ADC-2000 Units

**2/2006
DM**

Applicability: Shadin ADC-2000 air data computers (ADC), part numbers (P/N) 962830A-1-S-8, 962830A-2-S-8 or 962830A-3-S-8, Configurations B, C and D.

Note 1: ADC-2000 ADCs are known to be installed in, but not limited to, the following aircraft:

<i>Manufacturer</i>	<i>Model</i>
<i>Alliance Aircraft Group, LLC</i>	<i>H-250</i>
<i>B-N Group Ltd</i>	<i>BN2A</i>
<i>Bombardier Inc</i>	<i>DHC-3, DHC-6</i>
<i>Cessna Aircraft Company</i>	<i>172, 180, 180E, 185, 206, 206E, 206F, 206G 208, 210L, 310</i>
<i>de Havilland Inc</i>	<i>DHC-2</i>
<i>The New Piper Aircraft, Inc</i>	<i>PA-28-180, PA-28-181, PA-31-350, PA-32-300, PA-32-301, PA-32R-300, PA-34-200T</i>

Requirement:

1. Perform a pre-flight check in accordance with Paragraph E - Interim Procedures of Shadin Service Bulletin SB28-05-002, Rev C, dated 29 June 2005 to ensure the ADC and the Electronic Flight Information System (EFIS) altimetry accuracy (ie the altitudes, altimeter and elevation do not differ by more than 75 feet).

Requirement 1 may be performed by pilot, other than a student pilot, endorsed on the type. The requirement to perform a pre-flight check in accordance with this Directive is to be entered on the Maintenance Release in the Maintenance Required Section and compliance is to be certified before each flight.

2. If, as a result of the Requirement 1 check, the required altimetry accuracy is not confirmed, install a placard with letters at least 6mm (0.25 in) high in clear view of the pilot stating:

“FLIGHT IN IMC OR UNDER IFR NOT PERMITTED”

3. Return all affected ADCs to the Shadin Repair Facility for upgrade.

Instruments and Automatic Pilots

AD/INST/53 (continued)

Note 2: Contact the Shadin Technical Support Department for a Return Merchandise Authorization (RMA) number before returning the ADC.

Until the ADC-2000 is modified, returned and reinstalled, the aeroplane may only be flown if minimum equipment requirements for that aeroplane are still met. Once the upgraded ADC has been reinstalled the Requirement 2 placard may be removed.

4. Shadin ADC-2000, P/N 962830A-1-S-8, 962830A-2-S-8 or 962830A-3-S-8, Configurations B, C, and D, may not be installed on any aeroplane either as an initial installation or as a replacement spare unless it has been upgraded as specified in Requirement 2.

Note 3: FAA AD 2005-25-08 Amdt 39-14401 refers.

Compliance: For Requirement 1 - Within the next 25 hours time-in-service (TIS) the effective date of this Directive and thereafter before each flight until the ADC is upgraded as specified Requirement 3.

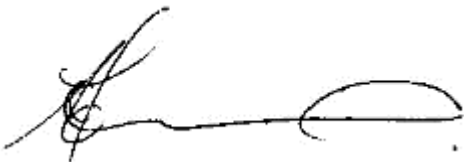
For Requirement 2 - Before further flight after the ADC fails the Requirement 1 altimetry accuracy check.

For Requirement 3 - Within 15 months after the effective date of this Directive.

For Requirement 4 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 23 January 2006.

Background: The United States FAA has received reports that certain ADC-2000 units display incorrect altitude information on the EFIS to the pilot. The display of incorrect altitude could cause the flight crew to react to this incorrect flight information and possibly result in an unsafe operating condition.



Charles Lenarcic
Delegate of the Civil Aviation Safety Authority

16 December 2005