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## AIRWORTHINESS DIRECTIVE

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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 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.

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### Radio Communication and Navigation Equipment

**AD/RAD/80**

**AT150 Transponder**

**8/2004**

**Applicability:** Narco Avionics Inc. AT150 transponders with "Chassis Level A", serial numbers (S/Ns) 10000 through 12598 inclusive.

**Requirement:**

1. For transponders that are not modified in accordance with Narco Service Bulletin (SB) AT150 No. 1 dated 29 July 1977, and with a S/N identified in the Applicability Statement, accomplish Narco SB AT150 No. 6, dated 31 January 2003.
2. For transponders that are modified in accordance with Narco SB AT150 No. 1, and with a S/N identified in the Applicability Statement, accomplish the following:
  - a. Change transponder "Chassis Level" marking to "B",
  - b. Test the transponders in accordance with the Testing the Modification paragraph of Narco SB AT150 No. 6, and
  - c. Perform a bench test to the transponder before returning it to service.

*Note 1: Information on bench testing can be found in AT150 Manual P/N 03606-0600.*

*Note 2: FAA AD 2004-08-16 Amdt 39-13586 refers.*

**Compliance:** For Requirements 1 and 2 -Within six months after the effective date of this Directive.

This Airworthiness Directive becomes effective on 5 August 2004.

## Radio Communication and Navigation Equipment

AD/RAD/80 (continued)

Background: This Directive requires modification to the transponder by the addition of a resistor and transistor to the circuit board. This results from reports to the United States Federal aviation administration of AT150 transponders not recognizing and responding properly to Mode S interrogations from Mode S ground stations and Traffic Alert and Collision Avoidance System (TCAS-II) airborne equipment. The Directive is intended to prevent loss of aircraft airspace separation and the possibility of mid-air collision.



James Coyne  
Delegate of the Civil Aviation Safety Authority

24 June 2004