

Instruments and Automatic Pilots

AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/INST/47 and issues the following 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.

AD/INST/47
Amdt 1

KC 225 AFCS

8/2001
DM

Applicability: Honeywell KC 225 Automatic Flight Control Systems (AFCS) with the following Part Numbers:

065-00183-0101	065-00183-0501	065-00183-2701
065-00183-0201	065-00183-0601	065-00183-2801
065-00183-0301	065-00183-2501	065-00183-2901
065-00183-0401	065-00183-2601	065-00183-3001

Note 1: KC 225 AFCS are known to be fitted to, but not limited to, the following aeroplanes:

<i>Manufacturer</i>	<i>Models</i>
<i>Aerostar Aircraft Corporation</i>	<i>PA-60-700P (Aerostar 700P)</i>
<i>The Cessna Aircraft Company</i>	<i>208 and 208B</i>
<i>Commander Aircraft Corporation (Rockwell)</i>	<i>114B and 114TC</i>
<i>Mooney Aircraft Corporation</i>	<i>M20M and M20R</i>
<i>The New Piper Aircraft, Inc.</i>	<i>PA-34-220T and PA-46-350P</i>
<i>Raytheon Aircraft Company (Beech)</i>	<i>58, 95-55, 95-C55, A36, B36TC, D55, and E55</i>
<i>SOCATA - Groupe Aerospatiale</i>	<i>TB20 and TB21</i>

SCHEDULE OF AIRWORTHINESS DIRECTIVES

- Requirement:
1. Inspect the KC 225 AFCS in accordance with Honeywell Installation Bulletin (IB) 472 Alert, Revision 1, dated January 2001, to determine the currently installed computer modifications (Mods).
 2. If the Requirement 1 inspection determines that only Mods 1 and/or 2 are incorporated, accomplish the following in accordance with IB 472 Alert, Revision 1:
 - a. Deactivate the KC 225 AFCS by pulling and banding the autopilot circuit breaker(s) to prevent operation of the KC 225 AFCS in flight; and
 - b. Fabricate a placard that indicates the KC 225 AFCS is inoperative and install this placard on the instrument panel within the pilot's clear view. The placard should use letters of at least 2.5 mm (0.10 inches) in height and contain the following words:

"KC 225 AFCS INOPERATIVE"

An optional alternative to the deactivation of the AFCS with only Mods 1 and/or 2 installed is to either:

Return the AFCS to the Honeywell Service Center for modification to install Mod 1, 2 and 3 (or higher); or

Contact Honeywell Product Support for a warranty replacement KC 225 AFCS that contains Mod 1, 2 and 3 (or higher) levels.

Note 2: If either of the optional alternates is adopted, the AFCS must remain deactivated and placarded in accordance with Requirement 2 until an AFCS unit with at least Mods 1, 2 and 3 is installed.

3. If the Requirement 1 inspection determines that no Mods are installed or at least Mods 1, 2, and 3 are installed, ensure that the aircraft records identify AFCS Mod status in accordance with IB 472 Alert, Revision 1. This Directive requires no further action.

Note 3: FAA AD 2001-10-09 Amdt 39-12235 refers.

Compliance: For Requirement 1 - Remains unchanged as 'Within the next 10 hours time-in-service after the effective date of the original issue of the Directive'.

For Requirement 2 - Remains unchanged as 'Before further flight after the Requirement 1 inspection'.

For Requirement 3 - Remains unchanged as 'Before further flight after the Requirement 1 inspection'.

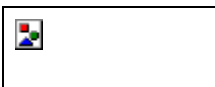
This Amendment becomes effective on 27 June 2001.

Background: This original issue of this Directive required inspection of KC 225 AFCS to determine the computer modification status, deactivation of any units with only Mods 1 and/or 2 incorporated, and the installation of an appropriate placard if the unit is deactivated/inoperative. The original issue also provided, as an alternative method of compliance, the option of installing a unit that incorporated Mod 3 or higher.

The original issue of the Directive was issued as a result of several reports that the AFCS was disconnecting without warning in a gross mistrim configuration. The actions specified by the Directive were intended to prevent an undesirable autotrim command that the autopilot cannot detect in the required time, which could result in the aeroplane deviating from the selected altitude, or the autopilot could disconnect without warning. This in turn could result in heavy loads at the control column and such loads in the pitch axis could result in loss of control of the aeroplane.

This amendment is issued to correct the title of the Directive.

The original issue of this Airworthiness Directive became effective on 15 June 2001.



Eugene Paul Holzapfel
Delegate of the Civil Aviation Safety Authority

20 June 2001