

Instruments and Automatic Pilots

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.

AD/INST/44 KAP 140 and KFC 225 Autopilot Systems 5/2000 DM

Applicability: Honeywell KAP 140 or KFC 225 autopilot system and incorporating autopilot servo actuators referenced in the Honeywell service information and the table presented below.

Note 1: AlliedSignal Avionics Inc. manufactured the KAP 140 and KFC 225 autopilot systems before transferring the design data to Honeywell.

Service Bulletin No	Date	Applicability
SB KS 270C-4 ALERT Revision 1	February 2000	KS 270C Pitch Servo Actuators, part number (P/N) 065-00178-XXXX (all versions), serial numbers (S/N) 2701 and below.
SB KS 271C-5 ALERT Revision 1	February 2000	KS 271C Primary Servo Actuators, P/N 065-00179-XXXX (all versions), S/N 4201, 4158 through 4148, and 4103 and below.
SB KS 272C-4 ALERT Revision 2	February 2000	KS 272C Trim Servo Actuators, P/N 065-00180-XXXX (all versions), S/N 2435 and below.

Note 2: The autopilot systems are known to be installed on but not limited to the following aircraft:

Type Certificate Holder	Aircraft Models	Autopilot Installed
<i>Cessna Aircraft Company</i>	<i>172R, 172S, 182S, 206H, and T206H</i>	<i>Model KAP 140</i>
<i>Commander Aircraft Company</i>	<i>114B and 114TC</i>	<i>Model KFC 225</i>
<i>Mooney Aircraft Corporation</i>	<i>M20R and M20S</i>	<i>Model KFC 225</i>

<i>Type Certificate Holder</i>	<i>Aircraft Models</i>	<i>Autopilot Installed</i>
<i>The New Piper Aircraft, Inc.</i>	<i>PA-28-181</i>	<i>Model KAP 140</i>
<i>The New Piper Aircraft, Inc.</i>	<i>PA-46-350P</i>	<i>Model KFC 225</i>
<i>Raytheon Aircraft Company</i>	<i>Beech A36, S/N E3157, E3218 through E3293, E3295, and E3297 through E3301</i>	<i>Model KFC 225</i>
<i>Raytheon Aircraft Company</i>	<i>Beech B36TC, S/N EA611, EA620, EA629 through EA649, and EA651</i>	<i>Model KFC 225</i>
<i>Raytheon Aircraft Company</i>	<i>Beech 58, S/N TH1841, TH1870, TH1884 through TH1932, and TH1934</i>	<i>Model KFC 225</i>

Requirement

1. Inspect the autopilot servo actuator for a loose fastener in accordance with the applicable service information referenced in the applicability statement of this Directive or disable the autopilot as follows:
 - a. Check the primary flight controls for normal feel and motion and make any necessary adjustments;
 - b. Pull and tie off the applicable circuit breakers as referenced in the Compliance Section of the applicable service information listed in the applicability statement of this Directive;
 - c. Fabricate a placard, using letters 3mm (1/8-inch) in height, with the words "**Autopilot Not Operational**"; and
 - d. Install the placard in the cockpit within the pilot's clear view.
2. If, as a result of the Requirement 1 inspection, a loose fastener is found, modify the servo actuator in accordance with the applicable service information referenced in the applicability statement of this Directive.

Note 3: FAA AD 2000-05-24 Amdt 39-11634 refers.

COMMONWEALTH OF AUSTRALIA
CIVIL AVIATION SAFETY AUTHORITY
SCHEDULE OF AIRWORTHINESS DIRECTIVES

(Civil Aviation Regulations 1998), PART 39 - 107

Compliance: For Requirement 1 - Within 15 hours time in service from the effective date of this Directive.

For Requirement 2 - Before further flight.

This Airworthiness Directive becomes effective on 12 April 2000.

Background: This Directive requires the inspection of the autopilot servo actuator for a loose fastener and modification of the autopilot servo actuator when a loose fastener is found. This Directive is based on a United States Federal Aviation Administration AD 2000-05-24 which was issued following a report of failure of the autopilot servo actuator to disengage when the autopilot power was removed. The actions specified are intended to detect and correct a loose fastener in the autopilot servo actuator which could cause the autopilot servo actuator to not disengage when power to the autopilot is removed.



Eugene Paul Holzapfel
Delegate of the Civil Aviation Safety Authority

4 April 2000