AD/INST/42 KSA 470 Autopilot Servo Actuator 7/98

Applicability: Allied Signal Bendix/King Model KSA-470 autopilot servo actuators, part numbers 065-0076-10 through 065-0076-15, serial numbers 0001 through 3081 inclusive.

Note: The actuators are known to be fitted to, but not limited to the aircraft listed below:

Aircraft	*Flight Director/Auto pilot System*	*Part Number*	*Location*
Raytheon (Beech) 400 Series	*KFC 400*	*065-0076-11*	*Yaw Axis*
		065-0076-15	*Roll Axis*
Raytheon (Beech) 200 Series	*KFC 400*	*065-0076-11*	*Yaw Axis*
Raytheon (Beech) 300 Series	*KFC 400*	*065-0076-15*	*Yaw Axis*
Dassault Falcon 20	*KFC 400*	*065-0076-15*	*Pitch Axis*
		065-0076-15	*Roll Axis*
Fairchild C26A/C26B	*KFC 400*	*065-0076-11*	*Yaw Axis*
Fairchild SA227-AC/AT/BC/CC/DC	*KFC 400*	*065-0076-15*	*Roll Axis*
Learjet 31A	*KFC 3100*	*065-0076-12*	*Pitch Axis*
		065-0076-14	*Yaw Axis*
		065-0076-15	*Roll Axis*
Lockheed (Grumman) S-2 Tracker	*KFC 325*	*065-0076-10*	*Special*
Piper 400LS and PA-42-1000	*KFC 400*	*065-0076-15*	*Yaw Axis*

Requirement:

1. Replace the autopilot servo actuator with an actuator that incorporates Mod 3, in accordance with procedures in the applicable maintenance manual.

2. An actuator, listed in the Applicability Statement, that has not had Mod 3 incorporated may not be installed on any aeroplane.

Note: FAA AD 98-08-20 Amdt 39-10469 refers.

Compliance:

1. Within the next 100 hours time in service after the effective date of this directive.

2. As of the effective date of this directive.

This airworthiness directive becomes effective on 18 June 1998.

Background: This directive requires the replacement of the autopilot servo actuator with a modified servo actuator. This is a result of the FAA receiving two reports of the affected actuators containing loose roll pins within the servo housing. Loose pins could fall out and become lodged in the output shaft, preventing this mechanism from disengaging.

The actions mandated by this directive are intended to prevent such an occurrence, which could result in an increased effort by the pilot to control the aircraft and possible loss of control of the affected flight control axis.