
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 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.

Boeing 747 Series Aeroplanes

AD/B747/320

AFM Limitation - RVSM Operations

2/2005

Applicability: Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F and 747-300 series aeroplanes together with Model 747SP and 747SR series aeroplanes, having variable numbers listed in Table 1 of this Directive or modified in accordance with FAA Supplemental Type Certificate SA960GL or SA1080EA-D.

Aeroplanes on which either Boeing Service Bulletin (SB) 747-34-2294, dated 25 May 1989, or SB 747-34-2296, dated 1 July 1989, has been accomplished, are excluded from the requirements of this Directive.

Table 1 - Applicable Aeroplanes Listed by Boeing Variable Number

RA521-RA528 inclusive	RD741	RS212
RA532-RA535 inclusive	RD781-RD783 inclusive	RS221
RA537-RA548 inclusive	RG173	RS222
RA671-RA675 inclusive	RG174	RS232
RA677	RH101	RS233
RB071-RB075 inclusive	RH102	RS235
RB601-RB607 inclusive	RJ321	RS236
RB681-RB685 inclusive	RJ322	RS237-RS241 inclusive
RB687	RR024	RS251-RS259 inclusive
RB690-RB693 inclusive	RR025	RS263
RB695-RB697 inclusive	RR261-RR263 inclusive	RS265-RS268 inclusive
RB721-RB723 inclusive	RR264-RR267 inclusive	RS292
RD055	RR361	RS311-RS320 inclusive
RD082	RR362	RS699
RD083	RR451	RS701-RS703 inclusive
RD221-RD227 inclusive	RR522	RS711-RS713 inclusive
RD231-RD235 inclusive	RR526	RS731
RD301	RR551-RR556 inclusive	RS732
RD302	RR566	RS741-RS743 inclusive
RD381-RD383 inclusive	RS001	RS771
RD461	RS002	RS786
RD601-RD607 inclusive	RS211	

Requirement: Revise the Limitations section of the Aircraft Flight Manual (AFM) to include the following statement. This may be accomplished by inserting a copy of this Directive in the AFM.

Boeing 747 Series Aeroplanes

AD/B747/320 (continued)

"Operation of the autopilot/flight director in command mode with Performance Management System (PMS) selected on the speed mode switch during cruise in Reduced Vertical Separation Minimum (RVSM) airspace is prohibited.

Use of PMS generated airspeeds and autopilot modes (e.g., IAS/ Mach) with manually crew-entered airspeeds (via Mode Selector Panel) are allowed."

When a statement identical to that above has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM and the copy of this Directive may be removed from the AFM.

Note: FAA AD 2004-25-06 Amdt 39-13894 refers.

Compliance: Within 10 days after the effective date of this Directive.

This Airworthiness Directive becomes effective on 17 February 2005.

Background: This Directive requires revising the AFM to prohibit operation of the autopilot/flight director in command mode with performance management system selected on the speed mode switch during cruise in reduced vertical separation minimum (RVSM) airspace.

United States Federal Aviation Administration (FAA) has advised of receiving reports of unexpected autopilot disconnects induced by the passing of another aeroplane within 1,000 feet below the aeroplane while they were operating in RVSM airspace. The Directive is issued to prevent unexpected disconnect of the autopilot during operation in RVSM airspace due to close passage of another aeroplane, which may result in altitude deviation and, consequently, could lead to a possible mid-air collision or a near miss with aggressive evasive action (by either or both aeroplanes). Aggressive manoeuvring at cruise altitudes and airspeeds could result in loss of control of the aeroplane and/or injury to passengers and crew.



David Punshon
Delegate of the Civil Aviation Safety Authority

6 January 2005