



Federal Aviation Administration

MMEL Policy Letter (PL) 101, Revision 2

Date: December 15, 2011

To: All Region Flight Standards Division Managers
All Aircraft Evaluation Group Managers

From: Manager, Air Transportation Division, AFS-200

Reply to Attn of: Manager, Technical Programs Branch, AFS-260

SUBJECT: Autopilot Relief

MMEL CODE: 22 (AUTOFLIGHT)

REFERENCE: PL-101, Revision 1, dated Sep 13, 2001
PL-101, Original, dated Aug 12, 1999

PURPOSE:

To establish standardized Master Minimum Equipment List (MMEL) relief for autopilot(s).

DISCUSSION:

Revision 2 omits the Global Change (GC) designation for this PL. Refer to PL-59 for post-GC policy.

Revision 1 provides category C relief for non transport category aircraft where operations do not require use of autopilot(s).

Autopilots have increased in importance to safe flight compared to the days when they were considered a convenience item. Flight crew training and procedures for Transport Category Aircraft now take full advantage of the benefits that autopilots can offer. An operational autopilot, particularly one capable of maintaining a constant altitude and direction, offers significant advantages in view of increased traffic, all-weather operations, and flight crew training factors. The risk of exposing the flight crew to excessive workloads and fatigue is increased while operating without certain autopilot capabilities. Although autopilot functions and their importance to safe flight vary considerably from one airplane model to the next, standardization can provide a common approach to relief. Relief granted by the MMEL and the operator's approved MEL must take into account the continued safe operation considering the next failure.

The intent of this PL is to provide, at dispatch whenever possible, at least one operating autopilot, specifically, one capable of maintaining a constant altitude and direction.

POLICY:

GENERAL POLICY CONSIDERATIONS LEADING TO SPECIFIC RELIEF

1. Flight Standards Board (FSB) members should, in consultation with the manufacturer, assess the suitability and limitations of inoperative autopilot systems and include their assessments in the FSB report. Attention should be given to requirements for flight crew training with other significant system failures where the absence of an autopilot would be disadvantageous.

2. The FOEB should consider the following in order to establish appropriate MMEL relief for autopilot systems:

- a. The inherent stability of the airplane model/series.
- b. Establish specific relief for specific functions or modes of the autopilot subsystems according to their utility in the event of another system failure.
- c. The potential effect of other inoperative systems, specifically those that incur additional flight crew workload, such as an inoperative automatic cabin pressurization controller.
- d. Specific relief policies necessary in ETOPS environments.
- e. Specific relief policies necessary in certain navigation environments (e.g., RVSM, RNP-5, and RNP-10 type operations).

The principal operations inspector (POI) will ensure that the operator incorporates FSB requirements in its approved training program. The checking and training requirements developed by the FSB must be carefully reviewed to ensure the adequacy of training in failures requiring manual manipulation of aircraft flight controls.

In all cases, the final decision to accept the aircraft rest with the flight crew. The decision should be based on the specific dispatch factors such as weather, traffic density, effects of other inoperative components, the experience level of the crew and the level of training in operations with inoperative autopilot.

SPECIFIC RELIEF POLICY

FOEBs should review MMELs under their cognizance and revise them as appropriate to adhere to the following criteria:

**** Flight Operations Evaluation Board (FOEB) Chairman should establish provisos (including M and/or O procedures) as appropriate for the specific aircraft considering the items listed in paragraphs 1 or 2 above.**

The term "AUTOPILOT" in the following provisos refers to a system that has functions which are intended to maintain constant altitude and a constant direction, both of which are operable and operating within acceptable limits. Other autopilot functions or modes are not the subject of the following provisos but should be addressed and, if applicable, listed in separate provisos by FOEB Chairmen.

The following standard MMEL proviso and repair category is adopted to provide standardization among all MMELs.

34 NAVIGATION		Repair Interval	Number Installed	Number Required for Dispatch	Remarks or Exceptions
1)	Transport Category Aircraft with Only One Autopilot Installed	B	1	0	**
2)	Transport Category Aircraft with Two or More Autopilots Installed	C	-	1	**
		B	-	0	**
3)	Non Transport Category Aircraft	C	-	0	May be inoperative provide operations do not require its use

Each FOEB Chairmen should apply this Policy to affected MMELs through the normal FOEB process.

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