



SAIB: SW-12-22

Date: March 22, 2012

SUBJ: MBB BK117 C-2 Auto Flight System

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to inform owners and operators of MBB BK117 C-2 helicopters equipped with 3 axis autopilot systems. There is an airworthiness concern regarding a software problem associated with operation of the automatic level-off function of this system. At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

Background

Eurocopter has issued an Alert Service Bulletin (ASB MBB BK117 C-2-22A-012) describing a software problem with the 3 axis autopilot system concerning the automatic level off function which normally is only triggered upon radar altimeter (RALT) ground proximity detection. Depending on the ground elevation profile, the altitude pre-selected by the pilot on the Autopilot Mode Selector and the RALT height above ground, the automatic level-off may erroneously be triggered when RALT height transitions from valid (2500 ft or less) to invalid (greater than 2500 ft) then becomes (once again) valid. In this scenario, due to a software anomaly, the helicopter may initiate a climb to an altitude much higher or descent to an altitude much lower than that pre-selected by the pilot. In the case of the descent, the altitude could be as low as 65 feet AGL. Eurocopter is working with the autopilot manufacturer to eliminate this anomaly with a target date of mid-2012.

Pilot monitoring of autopilot function compared to expected actions is considered normal operation. The scenario that reveals this anomaly is not typical, but certainly is possible. This SAIB is make BK117 C-2 helicopter owners and operators aware the autopilot software anomaly and to inform you of the expected forthcoming solution. When Eurocopter makes the software solution available, we will revise this SAIB to communicate this information to you.

Recommendations

In the interim, owners and operators of BK117 C-2 helicopters should obtain a copy of Eurocopter ASB MBB BK117 C-2-22A-012 and comply with the instructions included in that ASB, which explains in more detail the anomalous behavior and provides temporary Rotorcraft Flight Manual Supplement pages to be inserted in the RFM.

For Further Information Contact

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