



SUBJ: Navigation Localizer System

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to advise registered owners and operators of **The Boeing Company Model 787-8, -9, and -10 airplanes** of the potential for autopilot flight director system (AFDS) failure to capture the localizer (LOC) during ILS approach.

Background

The FAA received reports that the AFDS did not provide proper guidance to capture the localizer when intercepting the localizer at large angles (40 degrees or more) from the runway and beam centerline. Flight data has confirmed that during these events, the AFDS guidance partially reduced the intercept angle, but the airplanes continued through the localizer at a heading not aligned with the runway centerline. During reported events, the flight mode annunciation (FMA) on the primary flight display (PFD) continued to show "LOC" as the active roll mode without any indication of failure to capture.

In all events, the deviation from the localizer was accurately shown by both the localizer pointer and scale on the PFD, and by the airplane symbol on the navigation display (ND). Reports indicated that the airplanes initially turned toward the localizer heading, but then stopped short and flew at a constant heading that intercepted the runway heading at a 20 to 30 degree angle. During the events, localizer and glideslope modes were engaged (indicated on PFD FMA) and the AFDS provided guidance to descend on the glideslope, resulting in continued deviation from the runway centerline and descent on the wrong heading.

Boeing has issued Flight Crew Operations Manual Bulletin TBC-106 dated December 18, 2019, which provides information on this issue and operating instructions for AFDS operation during an ILS approach. The operating instructions reinforce existing procedures and training. Boeing and its supplier are currently developing updated software to correct this erroneous localizer mode behavior during ILS approaches.

Recommendations

The FAA recommends that all owners and operators of affected airplanes notify flight crews of this issue and incorporate the actions outlined in the referenced operations manual bulletin at the earliest opportunity

For Further Information Contact

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For Related Service Information Contact

Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>; or www.myboeingfleet.com/ReverseProxy/Authentication.html.