



FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NM-20-07
Date: April 16, 2020

SUBJ: Navigation - Glideslope System

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises owners and operators of **The Boeing Company Model 747-400 and 747-8 series airplanes, Model 757 airplanes, Model 767 airplanes, Model 777 airplanes, and Model 787-8, -9, and -10 airplanes** of potential erroneous autopilot flight director system (AFDS) guidance during instrument landing system (ILS) approaches.

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 Regulations (14 CFR) part 39.

Background

In-service reports have been received from operators of the affected airplanes of misleading pitch guidance when capturing or tracking the glideslope during an ILS approach. Investigation revealed that the misleading pitch guidance occurred at the same time as glideslope signal interference and, in the majority of cases, during glideslope capture. ILS signal interference can occur when vehicles, aircraft, or other factors affect the localizer or glideslope signal.

Service history indicates flight crews may follow misleading AFDS guidance after disconnecting the autopilot, which could potentially result in dangerously steep approaches short of the runway, or long approaches resulting in late touchdowns and possible runway excursions.

The Boeing Company issued Boeing Flight Crew Operations Manual Bulletin S489-50, dated October 18, 2019. This operations manual provides operating instructions for AFDS operation during periods of localizer or glideslope signal degradation or signal instability, and the possible flight deck effects during such an event. The operating instructions reinforce existing procedures and training.

Boeing and its supplier are currently working on developing operational program software to correct the misleading flight director guidance due to glideslope beam anomalies during ILS approach. The FAA is considering issuing rulemaking to mandate installation of this software update when developed, approved, and available.

Recommendations

The FAA recommends that all owners and operators of the affected airplanes incorporate the actions outlined in the referenced operations manual 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; <https://www.myboeingfleet.com>; or www.myboeingfleet.com/ReverseProxy/Authentication.html.