

5/4/2021

FOR YOUR INFORMATION

2021-54/10-3

To: FAA (ATM CLT TRACON, AJV-14)

1792533

Info: FAA (AFS-280, AFS-200, ASO-500, ANG-1, AJI-144, AVP-1, AVP-200, Director of Air Traffic Operations ESA South), A4A, ALPA, AOPA, APA, ASAP, ATSAP, ATSG, CAPA, EAA, IATA, ICASS, ICAO, IPA, NAFI, NATCA, NBAA, NTSB, RAA, SWAPA, Airport Manager, Charlotte/Douglas International (CLT), NC

From: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

Re: CLT Navigation Anomalies

We recently received an ASRS report describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.



Aviation Safety Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189



ACN 1792533

DATE / TIME

Date of Occurrence	202103
Local Time Of Day	1201 to 1800

PLACE

Locale	CLT.Airport
State	NC

AIRCRAFT / EQUIPMENT X

ATC / Advisory - TRACON	CLT
Make Model Name	Commercial Fixed Wing
Operating Under FAR Part	121

PERSON 1

ASRS Report Number	1792533
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EVENTS

Anomaly	Aircraft Equipment Problem - Less Severe
Anomaly	ATC Issue - All Types
Anomaly	Deviation - Track / Heading - All Types
Anomaly	Deviation / Discrepancy - Procedural - Clearance
Detector - Person	Flight Crew
Result - General	None Reported / Taken

NARRATIVE 1

On a vector to final, about 20 NM south of CLT, I observed the flight mode change from HDG to LNAV, then about 10 seconds later the flight director commanded a turn in the wrong direction. We were expecting all left turns to final, so when I saw the airplane starting to bank to the right, I immediately pressed the TCS button and leveled the wings.

The first time that I saw this happen recently, I dismissed it as a fluke. But this has now happened to me 3 times at the same airport on different approaches. I would estimate this is happening on about 15% of all approaches to this airport now. It starts with a vector to the intermediate approach course, arming the LNAV mode, and shortly after switching modes the computer steers the airplane across the approach course, over-corrects back in the opposite direction, and then chases the CDI to a normal alignment.

This error in navigation, even though semi-random in frequency, is of such concern that I have been briefing the risk of TCAS activations and NTZ [No Transgression Zone] incursions that could be caused by this computer glitch. At this airport, it is fair to assume that there is always traffic on the simultaneous parallel course. Today, I briefed this possibility with the pilot flying while at cruise, and his reaction when it happened, although not as fast as mine, was understandable. He thought the turn was at first a subtle deviation in the direction of the final course.

SYNOPSIS

Air carrier pilot reported that the flight director commanded a turn in the wrong direction during approach to CLT airport. Reporter advised, "this has now happened to me 3 times at the same airport on different approaches."