4/24/2024

FOR YOUR INFORMATION

2024-75/10-10

2090824

To: FAA (AJV-A, ATM ZBW ARTCC)

Info: FAA (AVP-1, AVP-200, AFS-200, AFS-260, ANE-600, Director of Air Traffic Operations ESA North), A4A, ALPA, AOPA, APA, ASAP, ATSAP, ATSG, CAPA, IATA, IBT, ICAO,

ICASS, IFALPA, IPA, NATCA, NBAA, NTSB, RAA, SWAPA

From: Becky L. Hooey, Director

NASA Aviation Safety Reporting System

Re: Similar Sounding Fix Names - HANAA/HAANA

We recently received ASRS reports 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.





ACN 2090824	
DATE / TIME	
Date of Occurrence	202402
Local Time Of Day	0601 to 1200
PLACE	
Locale	ZBW.ARTCC
State	NH
Altitude - MSL	36000
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - Center	ZBW
Make Model Name	Commercial Fixed Wing
Operating Under FAR Part	121
COMPONENT 1	
Aircraft Component	FMS/FMC
PERSON 1	
Function - Flight Crew	First Officer
Function - Flight Crew	Pilot Flying
ASRS Report Number	2090824
PERSON 2	
Function - Flight Crew	First Officer
Function - Flight Crew	Pilot Not Flying
ASRS Report Number	2090926
EVENTS	
Anomaly	Aircraft Equipment Problem - Less Severe
Anomaly	ATC Issue - All Types
Anomaly	Deviation - Track / Heading - All Types
Anomaly	Deviation / Discrepancy - Procedural - Clearance
Anomaly	Deviation / Discrepancy - Procedural - Published
	Material / Policy
Detector - Automation	Air Traffic Control
Detector - Person	Air Traffic Control
Detector - Person	Flight Crew
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Returned To Clearance
NARRATIVE 1	

Just prior to crossing ALLEX at FL 360, ATC gave us a reroute to proceed direct HANAA and then the FLOSI arrival. I mistakenly typed HAANA into the FMC, confirmed it with the Relief Pilot who the PM as the captain was on break. We both confirmed and executed direct HAANA, not realizing the misspelling. The aircraft turned about 25-30 degrees left. I then started to insert the arrival and connected the route discontinuity. We received an "insufficient fuel" message at which point I started to question the routing. A few minutes later I realized that we were going direct HAANA instead of HANAA. As I started to correct the FMC, ATC noticed we were heading off route and queried us. We acknowledged the misspelling and told him that we were correcting. We were only off course for about 3 minutes. The flight continued without further issues.

NARRATIVE 2

We were initially filed and cleared to EWR via FLOSI 4 RNAV arrival via NELIE transition. Near the ALLEX waypoint, Boston Center gave us a reroute: FLOSI 4 via HANAA transition. The pilot flying manually typed HAANA (note the misspelling) and placed it on the first line of the LEGS page. He stated that he would start turning the aircraft toward the newly assigned fix and then he would clean up the discontinuity that now appeared on the LEGS page by reprogramming the RNAV arrival.

He asked me to verify the new routing, which now appeared as HAANA.discontinuity.NELIE.IGN.FLOSI...etc. I agreed with his logic of initiating the turn toward the new clearance and confirmed his work, not noticing the misspelled HANAA. He executed the change and the aircraft slowly turned approximately 20 degrees to the left. It is worth noting that HANNA was about 20 degrees to the right. Next, he began selecting the runway, approach, arrival and transition from the FMC ARRIVAL menu. The LEGS page now showed HAANA.discontinuity.HANNA.ALB.ACOVE...etc. To eliminate the discontinuity, he selected ALB and moved it to the second line (below HAANA) on the LEGS page.

A message appeared on the scratchpad INSUFFICIENT FUEL, which was not concerning to me at the time, since the pilot flying was in the middle of changing the route and had not yet executed the most recent action. We acknowledged the message, deeming it a nuisance message and it was cleared from the scratchpad. A quick review of the new route appeared correct to me and I verbalized that he could press the execute button. About a minute or two later, the INSUFFICIENT FUEL message reappeared. We began reviewing the route trying to determine what caused the message. Boston Center called to verify that we were direct HANAA because the radar showed us diverging from the assigned route. At this point we realized our mistake and corrected to get back on course. Fortunately no traffic was in the vicinity during our lateral deviation.

SYNOPSIS

Air carrier flight crew reported similar sounding fixes HANAA and HAANA contributed to an FMS entry error and a course deviation corrected by ATC.