3/19/2024 **FOR YOUR INFORMATION**

2024-54/10-6

2084718

To: Gulfstream Aerospace Corporation, Honeywell Aerospace

Info: FAA (AVP-1, AVP-200, AFS-300, AFS-260, AFS-800, AFS-200, MKC-AEG, ANM-100,

AIR-360), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA,

TWU

From: Becky L. Hooey, Director

NASA Aviation Safety Reporting System

Re: Gulfstream G-650 Honeywell FMS Issues

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 2084718	
DATE / TIME	
Date of Occurrence	202402
Local Time Of Day	0601 to 1200
PLACE	
Locale	ZZZ.TRACON
State	US
ENVIRONMENT	
Flight Conditions	IMC
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - TRACON	ZZZ
Make Model Name	Gulfstream G650
Operating Under FAR Part	135
COMPONENT 1	
Aircraft Component	FMS/FMC
PERSON 1	
Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	2084718
EVENTS	
Anomaly	Aircraft Equipment Problem - Less Severe
Anomaly	Deviation - Track / Heading - All Types
Anomaly	Deviation / Discrepancy - Procedural - Clearance
Anomaly	Deviation / Discrepancy - Procedural - Published
	Material / Policy
Detector - Person	Air Traffic Control
Result - Flight Crew	Became Reoriented
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Requested ATC Assistance / Clarification
Result - Air Traffic Control	Issued New Clearance
Result - Air Traffic Control	Provided Assistance
NARRATIVE 1	

While climbing out of ZZZ off Runway XXL on ZZZZZX..ZZZZZ1 departure, FMS sequenced to incorrect waypoint after passing ZZZZZ waypoint. ATC inquired if we were navigating direct to ZZZZZ2 waypoint. Change of departure runway occurred just prior to taxiing due to disabled aircraft on planned Runway XXR. Pilot Monitoring programmed new runway into FMS while parked on FBO ramp prior to taxiing. The only change for the new Runway XXL is the first waypoint "ZZZZZZ3" on departure procedure. I (Pilot Flying) confirmed the new runway and the initial waypoint change. At some point after departure, the waypoints after ZZZZZ were dropped from the flight plan sequencing the FMS route to the enroute transition waypoint.

ATC issued new clearance to enroute transition.

Suggestions: Avionics Upgrade to Gulfstream 650 "Block 3" software to address known issues with G-650 Honeywell FMS.

SYNOPSIS

Pilot reported waypoints dropped out of the aircraft's Honeywell FMS. The reporter suggested upgrade from current software due to "known Issues" with the current software.