

9/16/2022

**FOR YOUR INFORMATION**

2022-89/3-13

1925993

To: Gulfstream Aerospace Corporation, Honeywell Aerospace

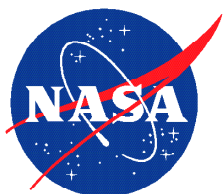
Info: FAA (AVP-1, AVP-200, AFS-300, AFS-260, AFS-800, AFS-200, MKC-AEG, ANM-100, AQS-230), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

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

Re: Gulfstream G650 CPDLC Issue

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](mailto:becky.l.hooey@nasa.gov).



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



## ACN 1925993

### DATE / TIME

Date of Occurrence	202208
Local Time Of Day	0001 to 0600

### PLACE

Locale	EGGX.ARTCC
State	FO
Altitude - MSL	41000

### AIRCRAFT / EQUIPMENT X

ATC / Advisory - Center	EGGX
Make Model Name	Gulfstream G650
Operating Under FAR Part	91

### COMPONENT 1

Aircraft Component	Air/Ground Communication
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### PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	1925993

### EVENTS

Anomaly	Aircraft Equipment Problem - Critical
Anomaly	Deviation / Discrepancy - Procedural - Published Material / Policy
Detector - Automation	Aircraft Other Automation
Detector - Person	Flight Crew
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Requested ATC Assistance / Clarification
Result - Air Traffic Control	Provided Assistance

### NARRATIVE 1

We had just passed 52 degree North and 30 degrees west. Our CPDLC equipment was to automatically switch over to Shanwick Control. It did not. In fact the automatic handoff locked up the box. We received a SELCAL on HF to call Shanwick radio. The radio operator passed a message from Shanwick Control to reset our CPDLC Equipment. When we attempted to do that, the result was the CPDLC taking down and locking up two of our three FMS's. Fortunately the number three FMS never failed. We continued navigating with that FMS as the navigation source. Within a very short time the number one and number two FMS's rebooted themselves. The CPDLC unit which is tied into all three FMS's regained some functionality, but did not come back to normal operations until after we landed and the aircraft was totally shutdown and restarted. There is no way to turn the CPDLC unit off in flight, the FMS's were also given a byte drop to clear out their internal memory after downloading same.

Honeywell and Gulfstream are investigating the problem, with no answer as of yet. But they admit this has happened before.

### SYNOPSIS

Gulfstream G650 Captain reported problems with the CPDLC equipment while in contact with Shanwick Control.