10/10/2024

FOR YOUR INFORMATION

2024-188/3-21

2160187

To: Boeing Commercial Airplane Company

Info: FAA (AVP-1, AVP-200, AFS-200, AFS-900, AFS-260, AFS-100, AIR-720, AIR-780, AIR-360, SEA-AEG), A4A, ALPA, AMFA, ASAP, ATSG, CAPA, IAM, IBT, ICAO,

ICASS, IFALPA, IPA, NTSB, PAMA, RAA, SWAPA, TWU

From: Becky L. Hooey, Director

NASA Aviation Safety Reporting System

Re: B787 Master Brightness Control Anomaly

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 2	160187
DATE / TIME	
Date of Occurrence Local Time Of Day	202408 No Local Time Of Day Stated
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - Center Make Model Name Operating Under FAR Part	ZZZ B787 Dreamliner Undifferentiated or Other Model 121
COMPONENT 1	
Aircraft Component	Instrument and Control Panels
COMPONENT 2	
Aircraft Component	Cockpit Lighting
COMPONENT 3	
Aircraft Component	PFD/ND
PERSON 1	
Function - Flight Crew ASRS Report Number	Captain 2160187
PERSON 2	
Function - Flight Crew Function - Flight Crew Function - Flight Crew ASRS Report Number	First Officer Pilot Not Flying Relief Pilot 2160375
PERSON 3	
Function - Flight Crew Function - Flight Crew ASRS Report Number	First Officer Pilot Not Flying 2160158
EVENTS	
Anomaly Detector - Person Result - Flight Crew	Aircraft Equipment Problem - Critical Flight Crew Returned To Departure Airport
NARRATIVE 1	

While adjusting the Master Brightness Control, all PFD/MFD displays with the exception of the Captain's MFD were simultaneously lost. The crew contacted Dispatch, Maintenance Control, Chief Pilot, and the Senior Manager Fleet Standards 777/787. The decision was made to [advise ATC] and return to ZZZ. The return was uneventful with a normal landing.

NARRATIVE 2

The flight was cruising from ZZZ to ZZZZ at FL360. Captain was the Pilot Flying (PF), and Person A was the Pilot Monitoring (PM). Person B, Person C, and I, as the Relief Pilot, were resting in the pilot rest area. Approximately 2 hours and 45 minutes after departure, Captain called us to the cockpit, reporting that the aircraft had lost information on four of the display units and that he wanted us to help make a decision. When I entered the cockpit, I saw that only one of the five display units was functioning, with the remaining four completely black. The captain was in communication with Maintenance Control and the dispatcher via satellite phone. After assessing the situation, we determined that the aircraft no longer met the conditions required to

continue flying to ZZZZ, so we decided to divert. Referring to the diversion planning documentation in the FOM and the B787 airport authorization list, we selected ZZZ as the most suitable airport. The approach proceeded without further incident, and the aircraft landed safely back in ZZZ at XA:51 Local time.

NARRATIVE 3

As the Relief Pilot on my rest break I received a call from the Captain to return to the cockpit. After the Captain performing IOE (Initial Operating Experience) duties to the First Officer and demonstrating Master Brightness switch 4 out of 5 flat panel liquid displays went blank and were lost for the duration of the flight. The Captain consulted with Maintenance Control, Dispatch, the Chief Pilot and finally his entire cockpit crew. A decision was made to [advise ATC] and return to ZZZ. The remainder of the flight was uneventful.

SYNOPSIS

B787 flight crew reported a malfunction of the master brightness control during cruise resulted in loss of flight deck instrument displays. The flight returned to the departure airport and landed normally.