3/6/2024

FOR YOUR INFORMATION

2024-41/3-7

2080804

To: FAA (AVP-200, AFS-200)

Info: FAA (AVP-1, 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, Boeing Commercial Airplane Company

From: Becky L. Hooey, Director

NASA Aviation Safety Reporting System

Re: B737-800 Misrigged Elevator Stab

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 2080804	
DATE / TIME	
Date of Occurrence	202309
Local Time Of Day	No Local Time Of Day Stated
AIRCRAFT / EQUIPMENT X	
Make Model Name	B737-800
Operating Under FAR Part	121
COMPONENT 1	
Aircraft Component	Elevator ControlSystem
PERSON 1	
Function - Flight Crew	Pilot Not Flying
ASRS Report Number	2080804
EVENTS	
Anomaly	Aircraft Equipment Problem - Critical
Anomaly	Deviation / Discrepancy - Procedural - Maintenance
Anomaly	Inflight Event / Encounter - Loss Of Aircraft Control
Detector - Person	Flight Crew
Result - Flight Crew	Took Evasive Action
NARRATIVE 1	

FCF (Functional Check Flight) for manual reversion. During flight control confidence check when going from A flight control switch to on and B off, plane abruptly pitched up and gained 200 ft. Switches were immediately restored, but plane was almost uncontrollable. Data afterward showed almost a 2.0G pitch up and 100 lb. of CA (Captain) down force and 55 lb. of FO (First Officer) down force. Data should be verified by Maintenance. We are lucky we didn't snap an elevator cable as Boeing states if you apply pressure on the yoke when applying hydraulic pressure an elevator cable can snap. We had 2 events with the same pressure applied. Months later I question if Maintenance checked the cable for early fatigue. If not, should this plane be checked now?

Maintenance incorrectly rigged elevator stab and flight control switch panel had a switch that did not fully close, so we were in manual reversion prior to the steps in the procedure. Second flight had same issue as Maintenance only fixed flight control switch panel. 3rd flight issue was corrected. A hangar that traditionally worked on wide body aircraft did the rig. Inexperience on the 737 was a factor. Keep the same hangars doing the work on the 737 that always have done them. Bring in experienced technicians for flight control repairs to oversee work.

SYNOPSIS

B737-800 pilot reported the aircraft abruptly pitched up while doing a flight control test and the aircraft was almost uncontrollable. According to the reporter Maintenance had performed incorrect work on flight controls, possibly due to inexperience with the aircraft.