## 12/30/2024 FOR YOUR INFORMATION

2024-234/3-27

2186039

To: Mitsubishi Heavy Industries

Info: FAA (AVP-1, AVP-200, AFS-200, AFS-260, AFS-100, AIR-360, AIR-720, AIR-780,

SEA-AEG), A4A, ALPA, AMFA, ASAP, ATSG, CAPA, IAM, IATA, ICAO, ICASS,

IFALPA, NTSB, PAMA, RAA, TWU

From: Becky L. Hooey, Director

NASA Aviation Safety Reporting System

Re: CRJ-550 Elevator Jam

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 2186039	
DATE / TIME	
Date of Occurrence Local Time Of Day	202411 1801 to 2400
PLACE	
Locale State	ZZZ.Airport US
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - Tower Make Model Name Operating Under FAR Part	ZZZ Regional Jet 550 ER/LR (CRJ550) 121
COMPONENT 1	
Aircraft Component	Elevator ControlSystem
PERSON 1	
Function - Flight Crew Function - Flight Crew ASRS Report Number	Captain Pilot Flying 2186039
PERSON 2	
Function - Flight Crew Function - Flight Crew ASRS Report Number	First Officer Pilot Not Flying 2186368
EVENTS	
Anomaly Detector - Person Result - Flight Crew NARRATIVE 1	Aircraft Equipment Problem - Critical Flight Crew Overcame Equipment Problem
IVALIACT.	

Repositioning flight from ZZZ1 to ZZZ. We encountered an elevator jam during the landing flare on Runway XXL at ZZZ. I was serving as the Captain and pilot flying (PF) for this flight.

During the after-start checklist, the flight controls synoptic page indicated full elevator travel. The takeoff proceeded without incident, and the Autopilot was engaged as normal. The flight was uneventful until the conclusion of the ZZZZZ X arrival into ZZZ. While leveling off at 3,000 feet and subsequently at 2,000 feet, an \*AP TRIM IS NU\* caution message was displayed, and the Autopilot exhibited difficulty maintaining level flight. In response, I disengaged the Autopilot, manually trimmed the aircraft, and reengaged the Autopilot in accordance with the Quick Reference Handbook (QRH). Following a second occurrence of the issue, I opted to disengage the Autopilot and conduct the approach manually.

During the landing flare, as the aircraft was about to touch down, I observed that the control column was abnormally stiff and exhibited minimal movement when pulled. Despite this, the aircraft touched down without further issues.

While taxiing to the gate, I instructed the First Officer (FO) to test his control column to assess the functionality of the controls and confirm findings on the Flight Control System (FCS) synoptic page. The elevator appeared to move normally in the downward direction but achieved only approximately three-quarters of its full range in the upward direction. Upon arriving at the gate and consulting with Maintenance, we were instructed to pull the PITCH DISC handle. This action confirmed that the FO's side of the elevator operated freely, while the Captain's side remained jammed.

A subsequent external inspection of the aircraft revealed no visible damage to the elevator or horizontal stabilizer.

## **NARRATIVE 2**

Repo flight from ZZZ1 to ZZZ. We experienced an elevator jam in the flare at ZZZ runway XXL. I was the FO and pilot monitoring. The elevator appeared to have full travel based on the flight controls synoptic page during the after start checklist and I did not notice any strange feel on the controls. We took off and the autopilot was engaged normally. Nothing eventful happened until the end of the arrival into ZZZ. When leveling off at 3,000 and then 2,000 there was an AP TRIM IS NU caution message and the AP did a poor job of leveling off. In the first case, the PF disengaged the AP, trimmed the aircraft, and reengaged the AP in accordance with the QRH. After the second occurrence, the PF disengaged the AP and continued the approach hand flying. In the flare, as the aircraft was about to touch down, he remarked that he had no control. The aircraft touched down normally. Once we had taxied clear of the runway, he asked me to feel the controls and confirm with the FCS page. The elevator moved down normally but up only approximately 3/4 of the way. After taxiing to the gate and calling maintenance, we were directed to pull the PITCH DISC handle. The FO side was free moving and the CA remained jammed. An external inspection of the aircraft did not indicate any damage to the elevator or stabilizer.

## **CALLBACK 1**

Reporter stated he has no further information on this incident.

## **SYNOPSIS**

CRJ550 flight crew reported they encountered an elevator jam while in the landing flare but were still able to make a safe landing.