

# Short Investigation Bulletin

DATE: November 28, 2022 REPORT # OCC-2022/0034 AIRCRAFT REGISTRATION: C6-CAB INVESTIGATION STATUS: Completed

#### **Summary**

Occurrence Bulletins are concise reports that detail the facts surrounding an aviation occurrence, as received in the initial notification and any follow-up enquiries. They provide an opportunity to share safety messages in the absence of a full investigation.

Released as required, the Bulletin provides a summary of the less-complex factual investigation reports conducted by the AAIA. The results, based on information supplied by organizations or individuals involved in the occurrence, detail the facts behind the event, as well as any safety actions undertaken. When applicable, the Bulletin also highlights important Safety Messages for the broader aviation community, drawing on earlier AAIA investigations and research.

### **General Details**

Date and Time of Occurrence:	17 <sup>th</sup> November, 2022; 2:00 pm EST (1900 UTC)			
Location	Lynden Pindling International Airport (MYNN), Nassau, Bahamas			
Persons on Board	Crew	2	Passengers	19
Injuries:	Crew	0	Passengers	0
Commanders License:	Commen	rcial		
Occurrence category:	System (	Compone	nt Failure or malfunctio	n (non-powerplant)
Occurrence type:	Acciden	t		
Investigation status:	Complet	ted		

### **Aircraft Details**

Aircraft Type and Registration:	Embraer E110, C6-CAB	
Year of Manufacture & Serial #:	S/N-110-198	
Number and Type of Engine(s)	Twin Turbo Prop. PT6A-34	
Type of operation:	Commercial Transport	
Information Source:	Field Investigation	
Nature of Damage:	Propellers, nose cone, underside of nose	

## **Occurrence Summary**

On November 17<sup>th</sup>, 2022, at approximately 2:00 pm EST (1900 UTC), an Embraer E110 aircraft with Bahamas registration C6-CAB, operated by Air Operator Certificate (AOC) holder LeAir, was involved in an accident while landing at the Lynden Pindling International Airport (MYNN), Nassau, Bahamas.

The commercial flight departed the Cap-Haitien International Airport (MTCH), Cap-Haitien, Haiti with 21 persons (2 crew, 19 passengers) on board. According to the pilots, the flight was uneventful up until the point of preparing for the approach into MYNN.

The pilot in command (PIC) advised that during the approach sequence, upon selecting the landing gear handle to the down position, the gear safe indication was observed for both main gears, but not for the nose landing gear. Subsequently, an attempt was made to extend the gear using emergency procedures as per the manufacturer's guidance outlined in the pilot operating handbook (POH). However, the unsafe gear indication was still observed.

Additionally, during this time, the PIC also observed that the tiller for the aircraft nose steering was moving freely. Nassau approach control was made aware of the observed unsafe landing gear indication and a low fly-over was coordinated with the control tower where air traffic control (ATC) advised that it appeared that only the main landing gears were extended.



Fig. 1 Photo of accident aircraft on side of runway 10 at MYNN

As a result, the PIC made the decision to burn off fuel in preparation for landing the aircraft without the benefit of the nose landing gear. After conducting a few orbits within the area, the pilots were given clearance by ATC to land on runway 10 at MYNN.

The pilot in command advised that during landing, back pressure was applied to the control column for an extended period during the roll out sequence, to delay the aircraft nose from coming into contact with the runway surface, and thereby maintain directional control of the aircraft.

After the nose of the aircraft came into contact with the runway surface, the aircraft veered to the right side of runway 10 and eventually exited the paved runway surface at a distance of approximately 3,280 feet from threshold of runway 10. It then travelled for approximately 804 feet from the exit point before coming to rest and oriented in a north-easterly direction, approximately 40°.



Fig. 2 Google earth image of accident aircraft point of rest

The aircraft received damages to both propellers, nose cone, and the underside of aircraft nose. Emergency response protocols [Airport Rescue &Fire Fighting (ARFF), Royal Bahamas Police Force (RBPF)] were initiated as required and there were no reported injuries. AAIA investigators were immediately dispatched and conducted the on scene portion of its investigation into the accident.

In the aftermath of the occurrence, during follow up assessments with the operator, it was discovered that the nose gear steering linkage was broken. This mechanical failure was identified as contributory to the prevention of the extension of the nose landing gear.

A limited scope investigation was conducted. The weather at the time of the accident was visual meteorological conditions (VMC) and not a factor. There were no safety recommendations issued in relation to this occurrence.

This Occurrence Bulletin contains facts which have been determined up to the time of issue. It is published to inform the aviation industry and the public of the general circumstances of accidents and serious incidents and should be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

All AAIA investigations are conducted in accordance with Annex 13 to the Convention on International Civil Aviation, and The Aircraft Accident Investigation Authority Act and Regulations The sole objective of the investigation of an accident or incident under these Regulations is the prevention of future accidents and incidents. It is not the purpose of such an investigation to apportion blame or liability. Accordingly, it is inappropriate that AAIA reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose.