



**PRELIMINARY REPORT ON THE SERIOUS INCIDENT INVOLVING BOEING 737-300 AIRCRAFT OWNED AND OPERATED BY AIR PEACE LIMITED WITH NATIONALITY AND REGISTRATION MARKS 5N-BUK WHICH OCCURED AT MURTALA MUHAMMED INTERNATIONAL AIRPORT, LAGOS ON THE 15TH OF MAY 2019**

<b>Aircraft Accident Report No.:</b>	AIRPEACE/2019/05/15/D
<b>Registered Owner and Operator:</b>	Air Peace Limited
<b>Aircraft Type and Model:</b>	Boeing 737-300
<b>Manufacturer:</b>	The Boeing Company, USA
<b>Date of Manufacture:</b>	1997
<b>Registration Marks:</b>	5N-BUK
<b>Serial Number:</b>	28561
<b>Location:</b>	Runway 18R, Murtala Muhammed International Airport, Lagos
<b>Date and Time:</b>	15th May, 2019 at about 19:34 h <i>All times in this report are local time (UTC +1) unless otherwise stated</i>

## **INTRODUCTION**

Accident Investigation Bureau (AIB) became aware of this occurrence via phone call from a passenger onboard the incident flight on the 5th of June 2019, three weeks after the incident. AIB contacted the operator and subsequently, investigators were dispatched to the corporate office of Air Peace Limited on the 6th of June 2019, to make further enquiries.

A visit to the aircraft and subsequent evaluation revealed evidence of significant damage to the aircraft structure and its No. 2 engine. The aircraft had been declared unserviceable



and grounded by the operator since the date of the incident, for further maintenance evaluation.

The Accident Investigation Bureau on the basis of these findings, commenced investigation into the circumstances of the occurrence under the provisions of Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2016 and Annex 13 of International Civil Aviation Organization (ICAO).

The purpose of this preliminary report is to provide details of initial facts, discussions and findings surrounding the occurrence; it includes information gathered from witness statements and a preliminary inspection of the aircraft.

**The investigation is ongoing.**

## **1.0 FACTUAL INFORMATION**

### **1.1 History of the flight**

On 15<sup>th</sup> May, 2019 at about 17:43 h, a Boeing 737-300 aircraft with nationality and registration marks 5N-BUK, owned and operated by Air Peace Limited departed Port Harcourt International Airport (DNPO) for Murtala Muhammed International Airport, Lagos; as a scheduled flight APK7091, operating on an Instrument Flight Rules (IFR) flight plan.

The flight departed DNPO with 118 persons on board including 6 crew members (2 flight crew and 4 cabin crew). The Captain was the Pilot Flying (PF) while the co-pilot was Pilot Monitoring (PM).

At 19:24 h, the aircraft was on final approach to Runway 18R. The crew called Control Tower (CT) requesting information about the Runway condition. CT reported that the approach path was clear but there was thunderstorm on the take-off path Runway 18R.

At 19:32 h, the crew called CT and reported 2 NM to touchdown. The CT acknowledged and transmitted weather condition as; wind 210°/11 knots and also issued a wind shear alert of 60 knots on the approach path of Runway 18R.

5N-BUK was sequenced to number three on approach. The crew stated that the preceding traffic landed successfully and there were no PIREPs from the crew of either aircraft.

The crew reported that at about 1 NM to touchdown, the Flight Management Computer (FMC) indicated a wind factor of 144°/34 knots. PF stated as follows: "I applied the required crosswind technique to keep the airplane flying towards the runway". The PM announced for a go-around and in response, the PF said he had control of the situation.

The aircraft touched down at 19:34 h in rain. The crew later informed CT of their intention to stop on the runway due low visibility and reported exiting the Runway at 19:40 h.



5N-BUK taxied to the apron and the passengers disembarked normally at about 20:00 h. An inspection of the aircraft after landing revealed that it was substantially damaged. The incident occurred at night.

## 1.2 Injuries to persons

<b>Injuries</b>	<b>Crew</b>	<b>Passengers</b>	<b>Total in the aircraft</b>	<b>Others</b>
<b>Fatal</b>	Nil	Nil	Nil	Nil
<b>Serious</b>	Nil	Nil	Nil	Nil
<b>Minor</b>	Nil	Nil	Nil	Nil
<b>None</b>	6	113	118	Nil
<b>Total</b>	6	113	118	Nil

## 1.3 Damage to aircraft

The aircraft was substantially damaged.

## 1.4 Other damage

Nil.

## 1.5 Personnel information

### 1.5.1 Captain (Pilot Flying)

Nationality:	Nigerian
Gender:	Male
Age:	29 years
Licence Type:	ATPL
Licence Validity:	24th June 2019



Aircraft Ratings:	B737-300/500, B737-600/900
Medical Validity:	2nd December 2019
Simulator Validity:	13th June 2019
Instrument Rating validity:	13th December 2019
Proficiency Check:	1st June 2019
Total Flying Time:	6,250 h
Total On Type:	5,950 h
Total On Type (PIC):	1,650 h
Last 90 Days:	232 h
Last 7 Days:	18 h
Last 24 Hours:	Nil

### **1.5.2 First Officer (Pilot Monitoring)**

Nationality:	Nigerian
Gender:	Male
Age:	33 years
Licence Type:	ATPL
Licence Validity:	9th June 2020
Aircraft Ratings:	B737-300/500, B737-NG
Medical Validity:	9th June 2020
Simulator Validity:	1st December 2019
Instrument Rating validity:	1st June 2020
Proficiency Check:	10th June 2019
Total Flying Time:	3423.23 h
Total On Type:	3262.34 h
Last 90 Days:	184.15h
Last 7 Days:	26.35 h
Last 24 Hours:	05.10 h

## 1.6 Aircraft Information

Type:	Boeing 737-300
Manufacturer:	The Boeing Company, USA
Date of Manufacture:	June 1997
Serial Number:	28561
Certificate of Airworthiness Validity:	26th June 2019
Certificate of Insurance:	8th October 2019
Certificate of Registration:	10 <sup>th</sup> July 2017
Noise Certificate:	12th July 2017
Airframe Time:	49,738:05 h
Cycles since New (CSN):	36885

### 1.6.2 Engines

	<b>Engine No. 1</b>	<b>Engine No. 2</b>
<b>Model</b>	CFM56-3C-1	CFM56-3B-1
<b>Serial No.</b>	857307	856377
<b>TSN</b>	75,025.22 h	43,560.14 h
<b>CSN</b>	65,224 h	36,494 h
<b>Year of Manufacture</b>	1992	1992

Fuel Type Used: Jet A-1

## 1.7 Meteorological Information

LOCATION:	DNMM
Time:	1800Z
Wind:	230°/11 kt
Visibility:	10 km
Weather:	Nil
Cloud:	FEW 390 m FEW 600 m CB
Temperature:	29/26°C



QNH:	1012 hPa
TREND:	NOSIG
LOCATION:	DNMM
Time:	1900Z
Wind:	110°/10G22 kt
Visibility:	7 km
Weather:	Thunderstorm in light rain
Cloud:	BKN 210 m FEW 510 m CB
Temperature:	23/23°C
QNH:	1014 hPa
TREND:	NOSIG

## **1.8 Aids to Navigation**

The Instrument Landing System (ILS) was available and serviceable at the time of the incident. The VOR/DME were as well serviceable.

## **1.9 Communications**

There was effective communication between the crew and Air Traffic Control.

## **1.10 Aerodrome Information**

Murtala Muhammed Airport with location indicator DNMM has two runways with designations 18R/36L and 18L/36R.

Runway 18R/36L has a dimension of 3,900 m by 60 m. Aerodrome Reference Point is 06°33'09N 003°18'48E and an elevation of 135 ft AMSL.

### 1.11 Flight Recorders

The aircraft was fitted with Solid-State Flight Data and Cockpit Voice Recorders.

	<b>Flight Data Recorder</b>	<b>Cockpit Voice Recorder</b>
Manufacturer	Allied Signal	Honeywell International Inc.
Part Number	980-4700-033	980-6022-001
Serial Number	SSFDR-0728	CVR120-15593

The Flight Data Recorder was downloaded and analysed at the Accident Investigation Bureau's Flight Safety Laboratory in Abuja.

The Cockpit Voice Recorder (CVR) was also downloaded at the Accident Investigation Bureau's Flight Safety Laboratory in Abuja. The relevant recordings of the occurrence were found to have been overwritten.

### 1.12 Wreckage and Impact Information

The damage observed on the aircraft are as follows:

1. Scrapes and dents on the No. 2 engine cowling
2. Scrapes and dents on the No. 2 thrust reverser cowling
3. Some fan blades were bent on No. 2 engine
4. Both Main Landing Gears Oleo struts collapsed
5. Scuffing of the sidewall of the No. 4 main wheel tyre.





**Figure 1:** Picture showing Scrapes and dents on the No. 2 engine cowling



**Figure 2:** Picture showing Scuff marks on the No. 4 main wheel tyre



**Figure 3:** Pictures showing evidence of collapsed Oleo Strut

### 1.13 Medical and Pathological Information

Not conducted.

### 1.14 Fire

There was no fire.

## **Initial Findings**

1. The flight crew were certified and qualified to conduct the flight in accordance with applicable regulations.
2. The Captain was the Pilot Flying while the First Officer was the Pilot Monitoring.
3. The aircraft landed on runway 18R at 19:34 h.
4. The aircraft was taxied to the apron and the passengers disembarked normally.
5. AIB was notified three weeks after the occurrence via a phone call by a passenger that was on the incident flight
6. A post-incident inspection of the aircraft showed substantial damage to the aircraft structure and its No. 2 engine cowling.
7. The CVR recording of the occurrence was overwritten.