



PRELIMINARY REPORT ON THE ACCIDENT INVOLVING AN MD-83 AIRCRAFT BELONGING TO DANA AIRLINES LTD WITH REGISTRATION NUMBER 5N-SRI WHICH OCCURRED AT PORT HARCOURT INTERNATIONAL AIRPORT ON 20TH FEBRUARY, 2018

Registered Owner and Operator:	Dana Airlines Ltd
Aircraft Type and Model:	MD-83
Manufacturer:	Boeing
Date of Manufacture:	October 1990
Registration Number:	5N-SRI
Serial Number:	53020
Location:	Runway 21, Port Harcourt Int'l Airport
Date and Time:	20th February, 2018 @ 1852 hrs <i>(All Times in this report are local, equivalent to UTC+1)</i>

INTRODUCTION

Accidents Investigation Bureau (AIB) was notified of the accident by the Nigeria Aerospace Management Agency (NAMA) on 20th February, 2018. Investigators were dispatched the following day, arrived the scene at 1100hrs and commenced preliminary investigation, under the provisions of Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2016 and ICAO Annex 13.

The purpose of this preliminary report is to provide details of the initial facts and discussion surrounding the accident; it includes information gathered from witness statements and a preliminary inspection of the aircraft and the accident site. The investigation is ongoing.

1.0 FACTUAL INFORMATION

1.1 History of the Flight

On 20th February, 2018 at about 1750hrs, an MD-83 aircraft with registration 5N-SRI belonging to Dana Airlines Ltd departed Abuja for Port Harcourt International Airport (DNPO) on a scheduled flight 9J 0363. An Instrument Flight Rules (IFR) flight plan was filed. There were 44 passengers and 5 crew on board.

The First Officer was the Pilot Flying (PF) while the Captain was the Pilot Monitoring (PM).

The aircraft took-off at 1806hrs. Following an uneventful flight, the crew reported that the aircraft arrived overhead DNPO at about 1843hrs and was vectored by Air Traffic Control (ATC) to descend to 3500ft and on a heading to cross extended centre line of ILS runway 21. Having crossed the extended centre line, the crew assessed and discussed the approach: the weather as depicted on the weather radar, and noted that there were no clouds from 7nm to the threshold. The aircraft was cleared for a localizer approach runway 21 and to descend initially to 2400ft. The PF executed a left turn and a gradual descent, intercepting the localizer at 17nm on the POT VOR/DME while descending to 2400ft on QNH 1008. Localizer was captured while in the descent on Auto Pilot 2 (AP2). The Minimum Descent Altitude (MDA) was adjusted to 460ft for Glide Slope out approach. The crew observed there was weather between 17nm and 7nm on the VOR/DME, but the ride on the approach was comfortable. At this time, the aircraft was in a landing configuration, flaps 40.

The Captain reported taking over control of the aircraft at 6nm and disengaged the auto pilot at 400ft AGL, made slight adjustments and touched down between 1000ft to 1500ft from the threshold.

The crew reported that the runway had experienced recent rain before arrival and after touch down, looked and felt contaminated with flood of water that did not drain well.

Spoilers and Reversers were deployed and brakes was applied. The aircraft continued on the landing roll, crossed the end of the runway to the blast pad. The aircraft came to a stop at a distance of 298m from the end of runway 21, slightly left of the extended centre line.

After the aircraft came to a complete stop, engines were shut down and emergency power switch was turned ON. Emergency light came ON, all other lights were OFF and the Public Address System was not working, the Lead crew had to open the cockpit door to obtain emergency evacuation instructions from the Captain. Emergency evacuation was carried out using only the left forward main door and the escape slide on this door did not deploy.

The Airport Rescue and Fire Fighting Services (ARFFS) arrived during the evacuation. All persons on board were evacuated unhurt.

The accident occurred at night.

1.2 Injuries to persons

Injuries	Crew	Passengers	Total in the aircraft	Others
Fatal	Nil	Nil	Nil	
Serious	Nil	Nil	Nil	
Minor	Nil	Nil	Nil	Not Applicable
None	5	44	49	Not Applicable
TOTAL	5	44	49	

1.3 Damage to Aircraft

The aircraft was substantially damaged.

1.4 Other Damages

Runway 03 Approach Lights were broken, NAV antenna was damaged.

1.5 Personnel Information

1.5.1 Captain (Pilot Monitoring)

Nationality:	Nigerian
Age:	59 years
License No:	ATPL 2510 (A)
License Validity:	1st December, 2021
Medical Validity:	29th October, 2018
Ratings:	MD 80, B737-300/500, MD DC10-30, B707, F28
Total Flight Time:	18881:30hrs
Hours on Type:	941:40hrs
Last 90 days	216:00hrs
Last 28 days:	57:50hrs
Last 7 days:	Not Available
Last 24 hours:	02:30hrs

1.5.2 First Officer (Pilot Flying)

Nationality:	Nigerian
Age:	31 years
License No:	CPL 6999
License Validity:	23rd July, 2020
Medical Validity:	26th November, 2018
Ratings:	B737-300/500, MD80/83
Total Flight Time:	358:04hrs

Hours on Type:	88:54hrs
Last 90 days:	88:54hrs
Last 28 days:	81:01hrs
Last 7 days:	Not Available
Last 24 hours:	02:30hrs

1.5.3 Flight Attendant (Purser)

Nationality:	Nigerian
Age:	34 years
License No:	2985
License Validity:	6th May, 2022
Medical Validity:	10th April, 2018
Ratings:	B737-300/500, MD80/83

1.6 Aircraft information

1.6.1 General information

Manufacturer:	Boeing
Serial No.:	53020
Date of Manufacture:	October 1990
Total Airframe Time:	66109:43hrs
Total Landing Cycle:	41794
Certificate of Insurance:	28th February 2018
C of A Validity:	14th April 2018

1.6.2 Engines

	Engine No: 1	Engine No: 2
Manufacturer:	Pratt & Whitney	Pratt & Whitney
Type/Model:	JT8D-217C	JT8D-217C

1.7 Meteorological Information

DNPO Time: 1630 UTC

Wind: 200°/06

Visibility: 10km

Weather: Thunderstorm (North West)

Cloud: Broken 330m, Few CB 600m South East-North

Temp/Dew: 32°C/20°C

DNPO Time: 1730 UTC

Wind: 300°/15

Visibility: 8km

Weather: Thunderstorm

Cloud: Broken 900m, Few 1900m

Temp/Dew: 28°C/22°C

QNH: 1007

Tempo: 5000m, Light Thunderstorm Rain

1.11 Flight Recorders

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

	Flight Data Recorder	Cockpit Voice Recorder
Manufacturer	Sunstrand Data Control Inc.	L3 Communication
Model	UF DR Digital Flight Data Recorder	FA 2100
Part Number	980-4100 FWUS	2100-1010-00
Serial Number	2987	000292937

The Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR) were retrieved and are at the Flight Safety Laboratory of Accident Investigation Bureau (AIB) Nigeria awaiting download and analysis.

1.12 Wreckage and Impact Information

The aircraft was substantially damaged.



Figure 1: Picture showing the final resting point of the aircraft



Figure 2: Picture showing the collapsed nose wheel



Figure 3: Picture showing damaged right wing



Figure 4: Picture showing skid marks on the runway

Initial Findings

- i. The crew were certified and qualified to conduct the flight.
- ii. The First Officer was the Pilot Flying and the Captain took over control at about 6nm to touch down.
- iii. The aircraft was dispatched with number 2 radio altimeter inoperative.
- iv. The number 2 DME receiver was unserviceable during the approach.
- v. The aircraft touched down between 1000ft and 1500ft from the runway threshold .
- vi. The runway was wet.
- vii. The Public Address System did not work after the aircraft came to a complete stop.
- viii. The Left forward main door was used for the evacuation.
- ix. The emergency escape slide on the left forward main door was not deployed
- x. The aircraft was substantially damaged.
- xi. The runway approach lights and landing aids were damaged.
- xii. The Airport Rescue and Fire Fighting Services (ARFFS) arrived during the evacuation.
- xiii. All persons on board were evacuated unhurt.