

Preliminary Report on accident involving a Boeing 737-400 aircraft with nationality and registration marks 5N-MBD operated by Max Air Limited, which occurred at Mallam Aminu Kano International Airport (DNKN), Kano Nigeria on 28 January 2025.

Operator:	Max Air Limited
Aircraft type and model:	Boeing 737-400
Manufacturer:	The Boeing Company, USA
Year of manufacture:	1997
Nationality and registration marks:	5N-MBD
Serial number:	28704
Location:	Runway 06, Mallam Aminu Kano International Airport (DNKN), Kano
Date and Time:	28 January 2025 at 22:49 h <i>(All times in this report are local time, equivalent to UTC+1 unless otherwise stated)</i>



INTRODUCTION

The Nigerian Safety Investigation Bureau (NSIB) was notified of the occurrence by the Federal Airport Authority of Nigeria (FAAN) on 28 January 2025. Investigators were dispatched to the site the same day and commenced post occurrence assessments, under the provisions of Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2023 and Annex 13 to the Convention on International Civil Aviation.

This Preliminary Report details the initial facts, discussions, and findings surrounding the occurrence. It includes information gathered from witness statements, flight recorders, Air Traffic Control (ATC) transcripts, and a preliminary inspection of the site and the aircraft.

This report presents the status of the notification's processing. Its content may still change and does not necessarily bind the conclusions published in the investigation's Final Report.

The investigation is ongoing.



1.0 FACTUAL INFORMATION

1.1 History of the flight

On 28 January, 2025, a Boeing 737-400 aircraft with nationality and registration marks 5N-MBD operated by Max Air Limited was scheduled to operate six flight sectors; Abuja-Kano, Kano-Abuja, Abuja-Bauchi, Bauchi-Abuja, Abuja-Lagos and Lagos-Kano, with six crew members (two-cockpit and four cabin crew). The crew resumed duty at about 13:00 h.

According to the Maintenance Engineer (ME), during post flight inspection on the second sector at DNAA, it was observed that the nose wheel tyres were worn to limits but noted that the nose wheel jack to carry out the tyre replacement was unserviceable. The ME then decided to release the aircraft for the next flight. The third and fourth sectors were uneventful.

Prior to the fifth sector, the nose wheel tyres were replaced by the ME at DNAA. At about 20:09 h, 5N-MBD departed Nnamdi Azikiwe International Airport (DNAA) for Murtala Muhammed International Airport Lagos (DNMM) as NGL 1645 and arrived at about 21:00 h. On ground DNMM, the Pilot carried out a post flight inspection of the aircraft and observed no abnormalities.

At about 21:42 h, 5N-MBD departed DNMM as NGL 1605 for DNKN with 59 persons-on-board (six crew and 53 passengers) on an Instrument Flight Rules (IFR) flight plan with an endurance of four hours. The Captain was the Pilot Flying (PF) while the First Officer was the Pilot Monitoring (PM).

At 22:22:54 h, NGL 1605 established contact with Kano Tower (TWR).

At 22:37:08 h, NGL 1605 was released to Tower (TWR) by Kano Approach Control (ACC) while descending FL150 and requested further descent.

At 22:37:17 h, TWR cleared NGL 1605 to continue descent to FL 050 direct TISOX.

At 22:42:24 h, NGL 1605 reported approaching 25nm and TWR responded; "at 25nm descend 4000ft on QNH 1019 cleared ILS approach Runway (RWY) 06 report established".



At 22:45:17.9 h, the PM called-out "twenty knots headwind" and the PF replied "let's get closer and see".

At 22:45:43.4 h, RADALT called-out twenty-five hundred.

At 22:45:56.1 h, the PF affirmed "gears down flaps 15 speed is checked".

At 22:46:12.6 h, the PF requested flaps 30 and the PM acknowledged. The PF called-out the aircraft speed as 144 kts and the PM acknowledged.

At 22:46:31.7 h, the Landing Procedure Checklist completed.

At 22:46:45.1 h, the PF called-out 19 knots headwind and the PM responded that 10 knots correction effected.

At 22:46:53 h, NGL 1605 reported established showing 9miles.

At 22:46:57 h, TWR cleared NGL 1605 to land RWY 06, wind calm, indicating southwesterly and NGL 1605 acknowledged.

At 22:47:20.7 h, RADALT called-out one thousand feet.

At 22:47:44.7 h, the PM requested starting the APU and PF acknowledged.

At 22:48:07.1 h, autopilot was disengaged.

At 22:48:38.4 h, the RADALT called-out "fifty forty thirty twenty ten" followed by the PM's response "speed brakes is up" and the PF acknowledged.

The aircraft landed right of runway 06 centerline and the PM called out the landing time as 22:49 h. An unidentified mechanical loud sound was then heard and followed by another at 22:49:12.1 h.

At 22:49:16 h, the PF called for flap forty, which was acknowledge by PM.

At 22:49:30.5 h, the PF exclaimed "it is that it is that nose wheel" and the PM responded "yeah"!

At 22:49:35.4 h, the PM declared MAY DAY and requested immediate assistance.



At 22:51:21.5 h, the PF requested the Lead Cabin Crew (LCC) to verify the absence of fire around the engines.

At 22:51:31.2 h, TWR informed NGL 1605 that the fire truck was behind the aircraft and requested the type of assistance needed. The PM responded "we need the fire truck to be around us we have burst tyre on the nose wheel". TWR further stated the fire truck was at your two o'clock and another one behind you.

At 22:52:10.2 h, the PM requested assistance for disembarkation, as the aircraft was immovable.

At 22:52:12.3 h, the LCC reported to the PF that there was no fire.

At 22:55:19.4 h, the crew requested stairs to disembark passengers and were informed by TWR that the stairs were close to the aircraft.

The disembarkation was carried out from the left rear service door.

All the passengers disembarked the aircraft unhurt.

The accident occurred at 22:49 h, night time in Visual Meteorological Condition (VMC).

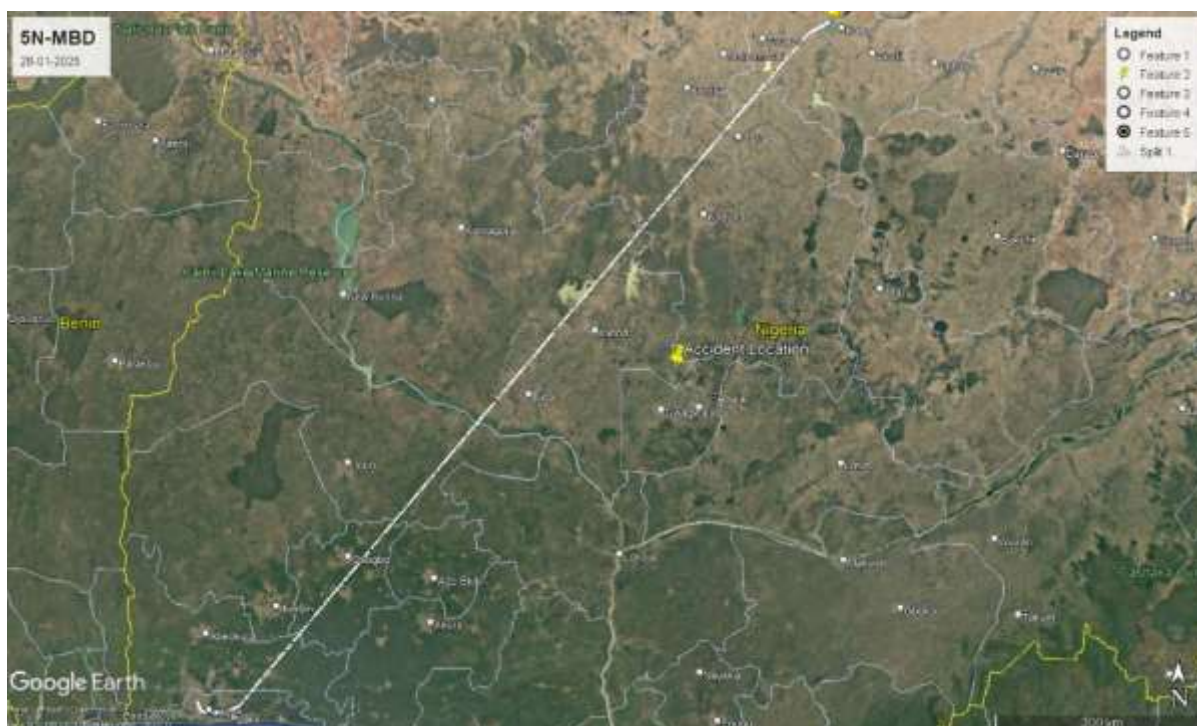


Figure 1: Flight track for NGL 1605



1.2 Injuries to persons

Injuries	Crew	Passengers	Total in the aircraft	Others
Fatal	Nil	Nil	Nil	Nil
Serious	Nil	Nil	Nil	Nil
Minor	Nil	Nil	Nil	Nil
None	6	53	59	Nil
TOTAL	6	53	59	Nil

1.3 Damage to aircraft

The aircraft was substantially damaged.

1.4 Other damage

The scratch mark on the runway was 1.28 m wide and 2.04 m long.



Figure 2: Scratch marks on the runway surface



1.5 Personnel information

1.5.1 Pilot

Nationality:	Nigerian
Age:	39 years
Licence type:	Airline Transport Pilot License (Aeroplane)
Licence:	Valid till 29 January, 2030
Aircraft ratings:	Boeing 737-300/500
Medical certificate:	Valid till 19 March, 2025
Instrument rating:	Valid till 9 October, 2025
Proficiency check:	Valid till 9 April, 2025
Total flying time:	5150 h
Total on type:	4950 h
Total on type (PIC):	2150 h
Last 90 days:	289 h
Last 28 days:	97 h
Last 24 hours:	06 h

During post occurrence interview, the Captain mentioned that while on ground Lagos, the aircraft was loaded more on the forward hold.

CVR recordings revealed some concern by the Captain about the nose landing gear immediately after the collapse.

1.5.2 Co-Pilot

Nationality:	Nigerian
Age:	31 years
Licence type:	Airline Transport Pilot Licence (Aeroplane)
Licence:	Valid till 12 June, 2028
Aircraft ratings:	Boeing 737-300/500



Medical certificate:	Valid till 6 March, 2025
Instrument rating:	Valid till 29 September, 2025
Proficiency check:	Valid till 29 March, 2025
Total flying time:	3020 h
Total on type:	2860 h
Last 90 days:	126 h
Last 28 days:	NIL
Last 24 hours:	06 h

1.5.4 Maintenance Engineer

Nationality:	Nigerian
Age:	49 years
Licence type:	Aircraft Maintenance Engineer Licence (AMEL),
Licence:	Valid till 27 July, 2026
Ratings:	Airframe and Power plant, Avionics
Aircraft type ratings:	Boeing 737-NG/Classic

(Aircraft Maintenance Engineer that replaced the Nose Wheel Tires on 28 January, 2025)

During post-occurrence interview, the ME reported that, 28 January 2025 was his second day on duty after two days off duty and resumed duty around 07:00 h. According to the ME, during post flight inspection on the second sector, the ME observed that the nose wheel tires were worn to limits but the equipment to carry out the replacement were not available. The ME sought the opinion of a colleague and concluded that the aircraft could be flown for another sector to Bauchi, pending the availability of the jack. The nose wheel jack to carry out the tyre replacement was obtained from NG Eagle airline.



1.6 Aircraft information

1.6.1 General information

Type:	Boeing 737-400
Manufacturer:	The Boeing Company, USA
Year of manufacture:	1997
Serial number:	28704
Certificate of Airworthiness:	Valid till 13 August, 2025
Certificate of Insurance:	Valid till 20 March, 2025
Certificate of registration:	Issued 27 August, 2021
Total airframe time:	39933:19 h
Total Landing Cycles:	44036



Figure 3: 5N-MBD post-occurrence on the runway at DNKN.



1.6.1.1 Aircraft Release Information

The aircraft dispatched with a takeoff weight (TOW) of 52350 kg and maximum takeoff weight of 59745 kg. Landing weight (LW) of 48850 kg and maximum Landing Weight of 56745 kg, and forward cargo compartment with 870kg of cargo/baggage and aft cargo compartment with 673kg as indicated on the Load sheet.

See Appendix I figure 1, 2, and 3.

1.6.2 Engines

Engine	Number 1	Number 2
Manufacturer	CFM International, USA	CFM International, USA
Type/Model	CFM 56-3C1	CFM 56-3B1
Serial number	858921	856357
Time Since New	41926:20 h	50454:54 h
Cycles Since New	34439	34935

Fuel Used: Jet A1

The aircraft arrived DNAA from DNBC at about 19:10 h. The Nose Wheel tires were replaced and certified by the ME.

Nose Assembly	Number 1 ON	Number 1 Off	Number 2 ON	Number 2 Off
Part Number	2607825-1	2607825-1	2607825-1	2607825-1
Serial Number	B-4709	B-0372	B-4467	B-13231

1.6.3 Excerpt Boeing 737-300/400/500 Aircraft Maintenance Manual (32-21-00)

NOSE GEAR - DESCRIPTION AND OPERATION

1. General

A. The nose gear supports the forward end of the fuselage and provides directional control while the airplane is on the ground (Figure 1). The nose gear includes a drag brace, shock strut, and torsion links, and is hydraulically actuated to retract forward and up into a wheel well recessed into the lower nose section of the airplane. The shock strut consists of inner and outer cylinders. The upper part of the outer cylinder is "Y" shaped with arms extended to the sidewalls of the wheel well. Trunnion pins connect the gear to airplane structure. The "Y" arms and pins provide lateral stability. The gear rotates about the trunnion pins during extension and retraction. Refer to (PAGEBLOCK 32-33-00/001) for information on nose gear extension and retraction.



Shocks and bumps during taxi, takeoff, and landing are absorbed by the shock strut which contains oil and is charged with compressed air or nitrogen.

Longitudinal stability is provided by a hinged drag brace which folds upward and aft during gear retraction (Figure 3). For steering, the shock strut inner cylinder turns within the outer cylinder. Torsion links connected at the upper end to a steering collar and at the lower end to the shock strut inner cylinder transmit a turning moment supplied by hydraulically actuated steering cylinders.

2. Nose Gear Shock Strut

A. The nose gear shock strut is the main supporting member of the nose gear. The shock strut includes an inner cylinder and an outer cylinder, metering pin assembly, upper and lower orifice assemblies, and upper and lower cam assemblies (Figure 2). The shock strut is attached to the nose wheel well structure by trunnions which are part of the outer cylinder. Pins are inserted through the trunnion ends into bearings attached to the wheel well structure. A steering collar clamped around the outer cylinder is connected to the upper torsion link and the upper torsion link is connected to the lower torsion link by an apex pin.

B. The inner cylinder and nose wheel axles are machined from a single forging. The fixed centering cam attached to the top of the inner cylinder mates with a similar cam in the outer cylinder when the inner cylinder extends. As these cams engage, the nose wheels will attain a straight forward position to ensure proper fit in the wheel well on retraction. This also ensures the nose wheels to be straight forward when landing. Upper and lower bearings provide sliding surfaces for movement of the inner cylinder in and out the outer cylinder. Annular grooves in the lower bearing provide space for the storage of two sets of spare seals. These spare seals are replacements for like seals installed between the inner cylinder and the lower centering cam, and between the lower centering cam and the outer cylinder.

C. The outer cylinder has a trunnion on each side near the top. Trunnion pins are inserted from inside outward extending into nose gear support brackets which are mounted on each side of the wheel well. During retraction and extension, the trunnion pins rotate in spherical bearings in the nose gear mounting brackets. Double lugs, to which the lower drag brace is attached, are near the top on the forward side of the outer cylinder. A steering collar encircles the outer cylinder and is bolted to hold the collar in an annular recess. The upper torsion link is bolted to a lug on the steering collar. The lower centering cam is in the outer cylinder to mate with the one at the top of the inner cylinder on inner cylinder extension. This centering cam has an annular groove in which the rebound valve piston ring is located. An upper orifice support tube is connected to the outer cylinder. The rebound valve piston ring in the groove around the upper centering cam is moved against the top of an annular groove as the inner cylinder extends. The fluid, which is compressed by the diminishing cavity between the upper and lower centering cams, is restricted to escape only through the



two small holes in a lip on the piston ring. A small portion of fluid will also escape through the piston rings working gap. The escaped fluid enters a cavity between the upper bearing spacer and the outer cylinder wall. The fluid is then forced through twelve holes, lengthwise in the upper bearing, into the cavity above the inner cylinder. This restricted flow of fluid acts as a snubber to slow the inner cylinder during extension.

D. Shocks to the nose gear shock strut are absorbed by the restricted flow of hydraulic fluid through the annular space between the orifice and the tapered metering pin and by the restricted flow of fluid through the rebound valve piston ring. When the inner cylinder is being compressed, the tapered metering pin, which is attached to the lower support tube in the inner cylinder, moves through the orifice in the upper support tube. This movement of the metering pin progressively reduces the area of the annular space between the orifice and metering pin. The reduction in area results in a diminishing rate of hydraulic fluid flow from the inner cylinder chamber to the upper side of the piston which produces increasing resistance to compression of the shock strut. Landing shocks and shocks incurred while taxiing are absorbed by the increasing volume of hydraulic fluid above the piston which further compresses the volume of compressed air or nitrogen in the upper end of the outer cylinder.

3. Nose Gear Steering Collar

A. The nose gear steering collar is at the middle of the outer cylinder (Figure 1). The collar is held clamped around the outer cylinder, by a bolt, in an annular recess immediately below the trunnions. Both of the two steering cylinders are connected to the steering collar and the upper end of the upper torsion link is also connected to the steering collar. When force is applied to the steering collar, by either steering cylinder, the collar transfers the force through the torsion links to turn the inner cylinder to the right or left respectively to which cylinder force is applied to give steering action to the nose wheels.

4. Nose Gear Torsion Links

A. The nose gear torsion links allow rotation between the inner and outer shock strut cylinders only when moved by the steering collar or when disconnected. The upper link is connected to the steering collar, and the lower link is connected to a lug on the inner cylinder (Figure 1). The upper and lower torsion links are joined together by an apex pin. This locks the nose wheels in the position assumed by the steering collar without affecting strut action. Steering forces applied to the steering collar by the nose gear steering system are transmitted to the inner cylinder by the torsion links.

5. Nose Gear Drag Brace

A. The nose gear drag brace, in conjunction with the nose gear lock link assembly, holds the nose gear in the up or down locked position (Figure 3). The drag brace

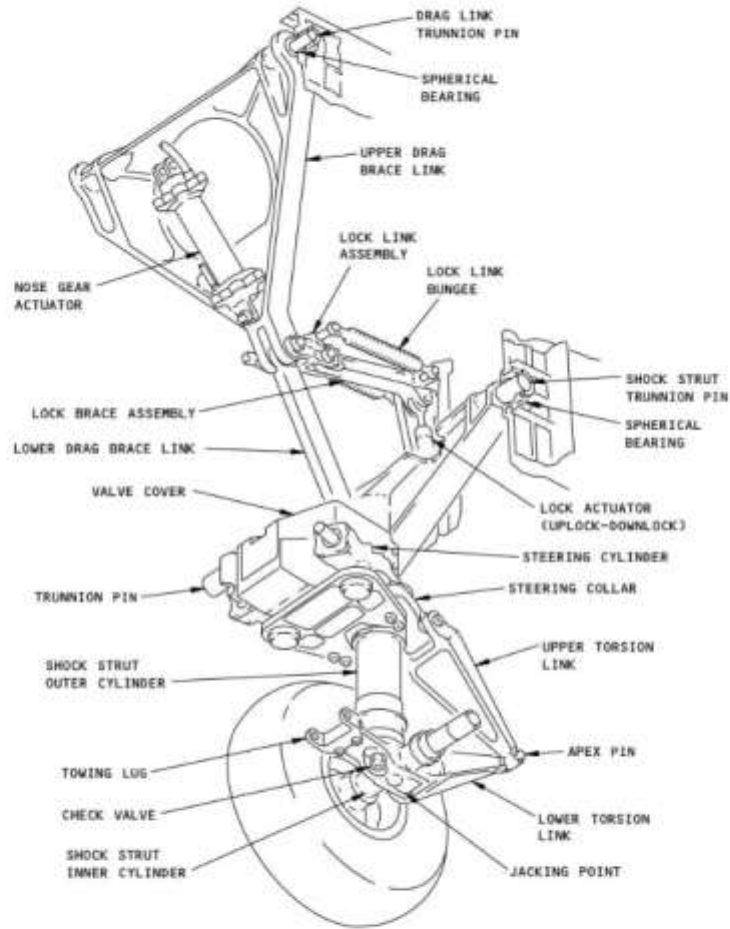


consists of an upper and lower link. The upper end of the upper link pivots on pins through support fittings attached to the wheel well sidewalls. During gear retraction, the upper link rotates upward and aft. The lower end of the lower link pivots about a pin which attaches the lower link to double lugs on the outer cylinder. These lugs are located just above the steering collar. During gear retraction, the lower link also rotates upward and aft relative to a pivot point. The upper and lower links are bolted together forming a hinge.

B. A fitting located near the lower end of the upper drag link, containing a spherical bearing, is the attachment point for the nose gear actuator. During gear retraction, the upper drag link is forced to rotate upward and aft by the nose gear actuator. This motion is transmitted to the shock strut through the lower drag link to raise the gear to the up position.



BOEING
737-300/400/500
AIRCRAFT MAINTENANCE MANUAL



92573 500041229492_V1

Nose Gear Component Location
Figure 1/32-21-00-990-801

EFFECTIVITY
MVV ALL

D6-390J1

©2017 BOEING PROPRIETARY - See title page for details

32-21-00

Page 4
Mar 25/2017



1.7 Meteorological information

Meteorological information for DNKN on the day of the occurrence

DNKN	2000Z	2100Z	2200Z
Wind	030°C/05	050°C /04	000°C /00
Visibility	9999	9999	9999
Weather	Nil	Nil	Nil
Cloud	NOSIG	NOSIG	NOSIG
Temp/Dew point	20°C /06°C	18°C /05°C	17°C /05°C
QNH:	1018	1019	1019

1.8 Aids to navigation

The status of the navigational aids at Mallam Aminu Kano International Airport (DNKN) on the day of the occurrence was as follows:

"KAN" DVOR/DME	112.5 MHz	CH72X	-	'Serviceable'
"KAN" ILS/DME	109.5 MHz	CH32X RWY 06		'Serviceable'
"KAN" ILS/DME	111.1 MHz	CH48X RWY 24		(NOT CALIBRATED)
FREQUENT SMART STRIP MAIN AND BACKUP				(UNSERVICEABLE)
FREQUENT FLIGHT PLAN TERMINAL				(UNSERVICEABLE)
FREQUENT COMMUNICATION BOX 1, 2, AND 3				(SERVICEABLE)
FREQUENT STATUS MONITOR				(SERVICEABLE)
FREQUENT ATC CLOCK 1 AND 3				(SERVICEABLE)
FREQUENT ATIS DISPLAY TERMINAL				(SERVICEABLE)
RADAR MONITOR AND AERODROME BEACON				(SERVICEABLE)



ALDIS LAMP	-	(SERVICEABLE)
BINOCULAR	-	(SERVICEABLE)
NIMET WX PC1 (COASTAL)		(SERVICEABLE)
NIMET WX PC2 (METER WZ)		(UNSERVICEABLE)
NIMET DIGITAL ANEMOMETER		(UNSERVICEABLE)
NIMET L. L. W. A. S.		(UNSERVICEABLE)
TELEPHONE LINE 1 AND 2		(SERVICEABLE)
BINATONE INTERCOMS		(SERVICEABLE)
POLYVISION ZETRON INTERCOMS		(UNSERVICEABLE)

1.9 Communication

The status of the communication equipment at Mallam Aminu Kano International Airport (DNKN) on the day of the occurrence was as follows:

VHF 118.1 MHz	TWR MAIN AND BACK-UP FREQ.	(SERVICEABLE)
VHF 119.1 MHz	TWR SECONDARY FREQ.	(SERVICEABLE)
VHF 121.7 MHz	DOMESTIC FREQ.	(SERVICEABLE)
VHF 121.5 MHz	EMERGENCY FREQ.	(SERVICEABLE)
VHF 123.6 MHz	ATIS FREQ.	(SERVICEABLE)
VHF ICOM TRANSCEIVER		(SERVICEABLE)



1.10 Aerodrome information

Mallam Aminu Kano International Airport (DNKN) has aerodrome reference points 12°02'53"N 8°31'25"E and an elevation of 476 m (1,562 ft.), the aerodrome has two bi-directional runways respectively.

with orientation RWY 05/23 and RWY 06/24. The runways have an asphalt/concrete surface length of 2450 m by 45 m, and 3300 m by 60 m

1.11 Flight recorders

The aircraft is fitted with a Solid-State Flight Data Recorder (FDR) and a Cockpit Voice Recorder (CVR) with the following particulars:

Recorders	Flight Data Recorder	Cockpit Voice Recorder
Manufacturer	Honeywell, USA	Honeywell, USA
Model	SSFDR	SSCVR
Part Number	980-4700-042	980-6022-001
Serial Number	1544	120-04637

The CVR and FDR were retrieved, downloaded, and analyzed successfully at the Transportation Safety Laboratory of Nigerian Safety Investigation Bureau (NSIB), Abuja, Nigeria.

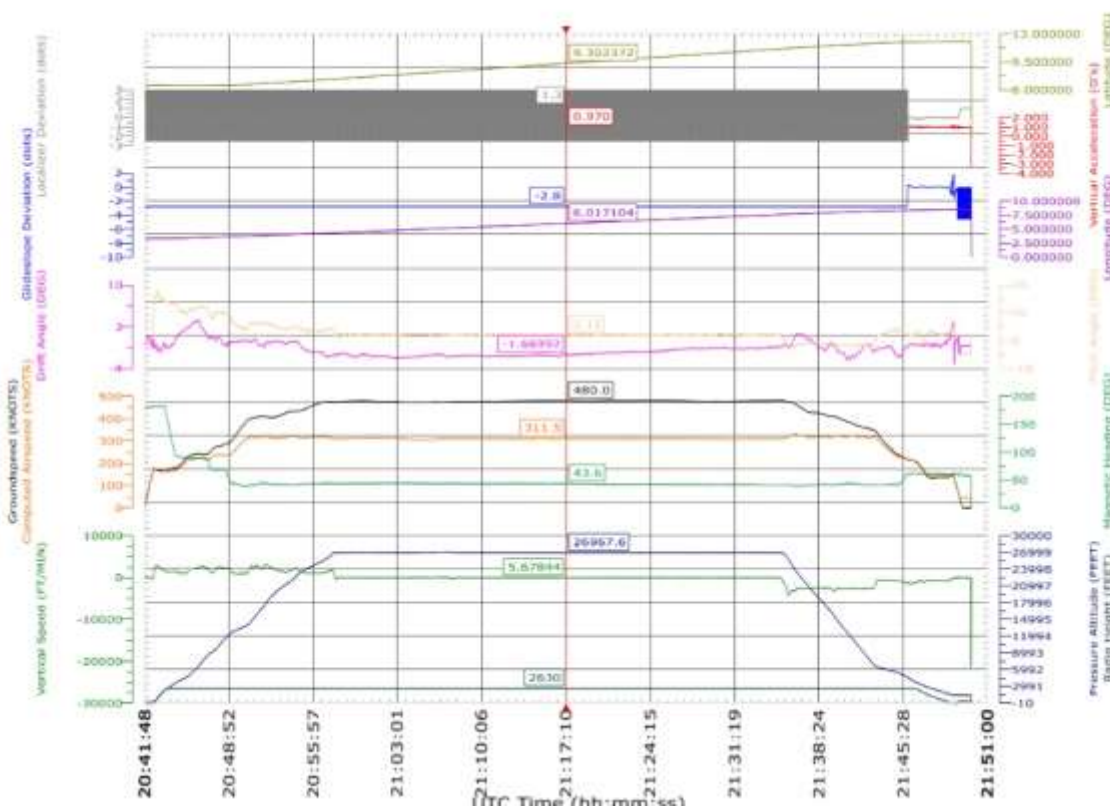


Figure 4: Relevant flight parameters for NGL 1605

The table below shows the position of flaps, localizer deviation and glideslope deviation at 1000ft, 500ft, threshold and touchdown.

Radio Altitude (RA)	At 1000ft	500ft	threshold	Touchdown
Flaps position	30°	30°	30°	30°
Localizer deviation	0.4	0.7	1.8	0.7
Glideslope deviation	-0.5	-0.5	2	3

1. Flight parameters for the aircraft during the approach.

FDR data indicated the aircraft crossed threshold at 37 ft above ground with localizer deviation of 1.8 right. At 22:49:41.5 about four feet to touchdown, wind was 335° at 8.2 knots. At touchdown, wind was 051.7° at 1.7 knots with localizer deviation of 0.8 right and left rudder input of 2.4.

At 22:49:50 h, weight on nose wheel (WOW) was recorded after touchdown. At 22:50:02 h nose landing gear collapsed, at a ground speed of 83.8 knots and left rudder input of 2.8.



1.12 Wreckage and impact information

The aircraft landed right of runway 06 centerline, while on landing roll at a distance of about 2180 m from the runway threshold, the nose wheel gear collapsed. The aircraft continued for about 523 m in contact with the runway surface and came to a stop at about 2703 m from the runway threshold.

The following damages observed:

1. Nose wheel gear collapsed rearward and stuck under the belly of the fuselage.
2. Number 2 engine inlet punctured and dents on 16 fan blades
3. Number 4 main wheel tyre burst
4. Nose wheel tyres.
5. Right main landing gear wheel well door sheared off
6. Nose wheel landing gear right door sheared off



Figure 5: Aerial view showing distance travelled by the aircraft on the runway



Figure 6: Damaged No. 4 main wheel tire

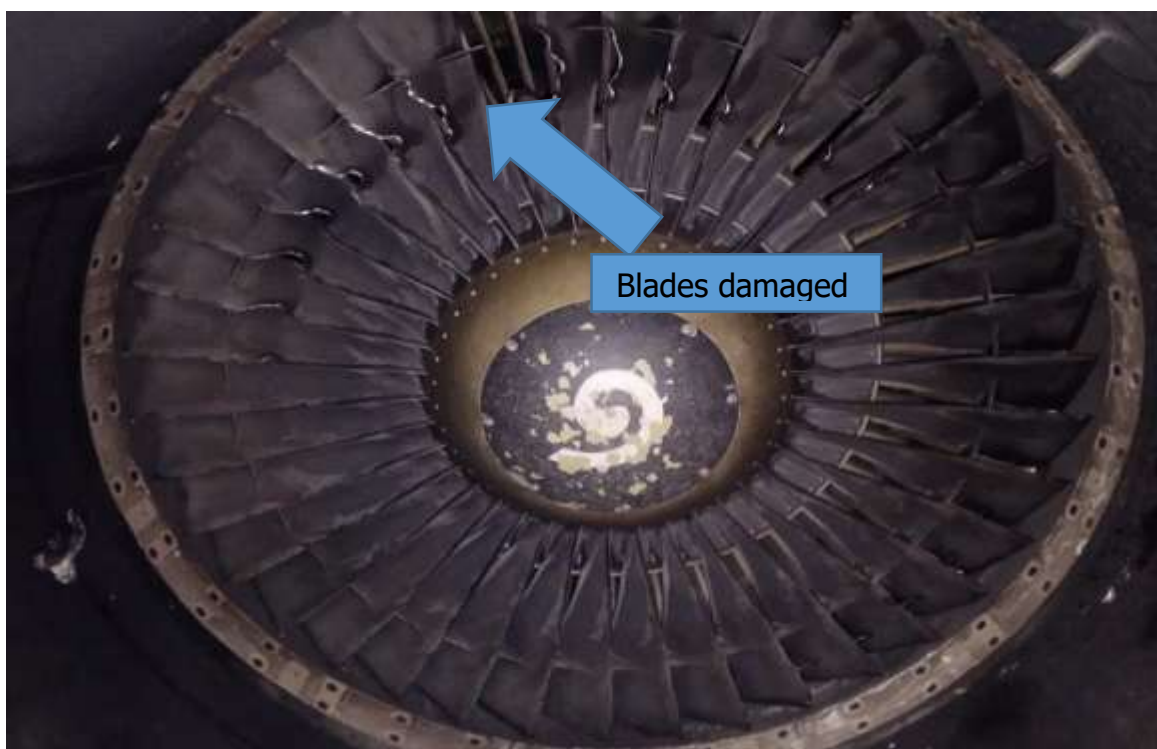


Figure 7: Engine No. 2 inlet and fan blades damage

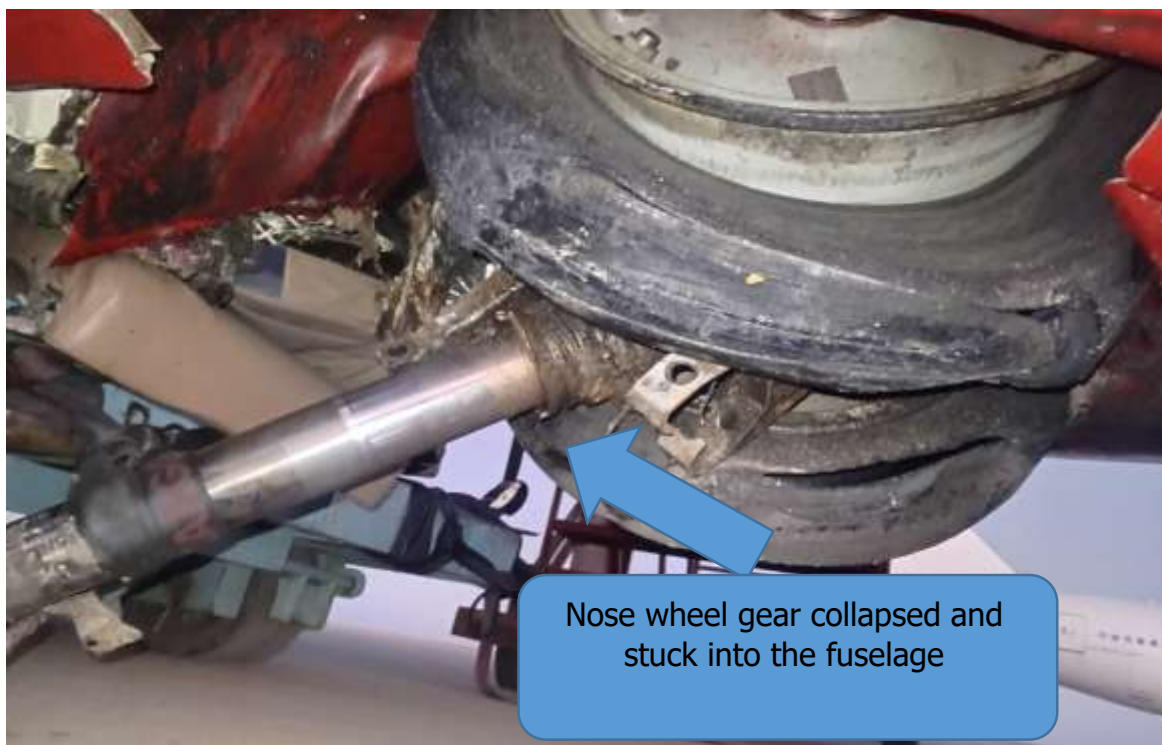


Figure 8: Nose wheel gear collapsed and stuck into the fuselage belly.



Figure 9: Debris of the damaged nose landing gear



Figure 10: Debris of the damaged nose landing gear



Figure 11: Debris of the damaged nose landing gear



Figure 12: Debris of the damaged nose landing gear



Figure 13: Debris of the damaged nose landing gear



Figure 14: Debris of the damaged nose landing gear



Figure 15: Debris of the damaged nose landing gear



Figure 16: Debris of the damaged nose landing gear



Figure 17: No.2 Main wheel well door



Figure 18: Nose wheel well door.

1.13 Medical and pathological information

The Crew were immediately taken to Aminu Kano Teaching Hospital for toxicological assessment. Clinical observation as at 02:08 h of 29 January, 2025 shows that, the Captain was fully conscious and oriented with stable vital signs and his urine test analysis was found to be negative for all the observed biochemical parameters.

Clinical observations as at 02:00 h of 29 January, 2025 shows that, the Co-pilot was fully conscious and oriented with stable vital signs and his urine test analysis was found to be positive for Cotinine and unremarkable for other parameters.



1.14 Fire

There was no pre or post impact fire.

1.15 Survival aspect

The accident was survivable as the structural integrity of the cabin and cockpit was not compromised. There was no fire after the occurrence and the seat and seat belt harnesses were intact. It took about three minutes for the stairs to arrive and one minutes 43seconds for the passengers to disembark through the aircraft's left rear service door.

1.16 Test and Research

Nil

1.17 Organization and management information

1.17.1 Max Air Limited

Max Air Limited (Max Air), a registered airline with head office and main operational base located in Kano holds an Air Operator Certificate (AOC) with number: MAX/AOC/06-13/01 issued in accordance with the requirements of the existing Nigeria Civil Aviation Regulations (Nig. CARs). It is authorized to conduct passenger and cargo, scheduled operations and charter flight operations. The airline operates a fleet of three Boeing 747s, Seven Boeing 737s and one Boeing 777 aircraft.



2.0 FINDINGS

1. The flight crew were licensed to conduct the flight.
2. The aircraft had a valid Certificate of Airworthiness
3. The aircraft was scheduled for six sectors with the same crew.
4. Four sectors were flown normally. The nose landing gear tyres were observed to be worn to limits prior to the third sector.
5. The nose landing gear wheels were replaced at Abuja prior to the fifth sector
6. During the flight, the crew raised some concern about the lock wheel protection mechanism.
7. The aircraft landed right of runway 06 centerline.
8. The Nose landing gear collapsed rearwards during the landing roll at a distance of 2180 m from Runway 06 threshold.
9. The aircraft came to stop at a distance of 597 m to the end of Runway 06.
10. The aircraft was substantially damaged.
11. The rear left service door was used for egress.
12. All the aircraft occupants disembarked unhurt.
13. The accident occurred at 22:49 h, night time in Visual Meteorological Condition.
14. The Aerodrome Rescue and Fire Fighting Services (ARFFS) arrived the scene at 22:50 h.



3.0 IMMEDIATE SAFETY RECOMMENDATION

3.1 Safety recommendation 2025-002

The Nigerian Civil Aviation Authority should enhance its safety oversight of Max Air Limited.


Further Investigative Actions

1. Detailed inspection and testing of the collapsed Nose Landing Gear.



APPENDICES

APPENDIX I:


MaxAir Ltd.
RC: 479306
FLIGHT RELEASE FORM

035804

Date 28/01/2025

NGL 1605 A/C 5N-MBD

STD 2032 ETD _____ ROUTE LOS-KAN

Fuel Situation AVAILABLE AT DESTINATION AND AT THE ALTERNATE

APS WT	<u>35317</u>	KG	MZFW	<u>53770</u>	KG
PAX	<u>5040</u>	KG	MTOW	<u>59745</u>	KG
Cargo/Baggage	<u>1793</u>	KG	MLW	<u>56745</u>	KG
ZFW	<u>47150</u>	KG			
Fuel	<u>10200</u>	KG			
TOW	<u>52350</u>	KG			
B/OFF	<u>3500</u>	KG			
LW	<u>48850</u>	KG			

DESTINATION WX KAN SW 030.0EKT

ALTERNATE WX HRV SW 060.0EKT

VIS	<u>C</u>	VIS	<u>C</u>
WX	<u>H</u>	WX	<u>H</u>
CLD	<u>V</u>	CLD	<u>V</u>
	<u>O</u>		<u>D</u>
	<u>K</u>		<u>K</u>


QNH 1018 HPA ONH 1013 HPA

TEMP 29/06°C DP TEMP 29/13°C DP

NO SIG

Figure 1: Flight release





RC: 475386
MaxAir Ltd.
 NO 18 ASHTON ROAD KANO - NIGERIA
 TEL: 081621508 E-mail: ocr@gmaxair.com.ng

LOADSHEET & BALANCE
 BOEING MODEL (737-400)
 ALL WEIGHT IN KILOGRAM (KG)

Priority	Address(es)							
Origin	Recharge / Date / Time							
Flight	A/C Reg.		Version		Crew	Date		
	5N-MBD		12/12/12		102/04	28/01/12		
Basic Weight	34587		MAXIMUM OPERATIONAL WEIGHTS FOR		ZERO FUEL	TAKEOFF	LANDING	
Crew	501		Takeoff Fuel +		53070	10300	577	
Parity	227		ALLOWED WEIGHT FOR TAKEOFF (lowest of a, b, or c)		65370	63082	577	
DRY OPERATING WEIGHT	35317		Operating Weight					
Takeoff Fuel +	10300		ALLOWED TRAFFIC LOAD =					
OPERATING WEIGHT =	45617							

Dest.	No. of Passengers				Cab Bag	Total	FORWARD HOLD				AFT HOLD	CABIN 0	Remarks			
	M	AF	C	RF			1	2	3	4			PAX		PAD	
													PAX / / / PAD / /			
													PAX / / / PAD / /			
K	5	3				410	270	440					PAX / / / PAD / /			
						1543	270	600	673							

Total Passenger Weight	+ 875	4452	Allowed Traffic Load	114128
TOTAL TRAFFIC LOAD	=	5743		5995
Dry Operating Weight	+ 35317		UNDERLOAD BEFORE LMC	= 5155
ZERO FUEL WEIGHT		41312	LAST MINUTE CHANGES	
Total Fuel	+ 10600			
TAXI WEIGHT		51912		
Taxi Fuel	⊖ 300			
TAKEOFF WEIGHT		51612		
Taxi Fuel	⊖ 3500		Total Fuel (Taxi Fuel)	10600
LANDING WEIGHT		48112	Taxi Fuel	⊖ 300
			TAKEOFF FUEL	= 10300

Figure 2a: Load Sheet and Balance Chart



CHART 12c/132y Pax B737-400

001629

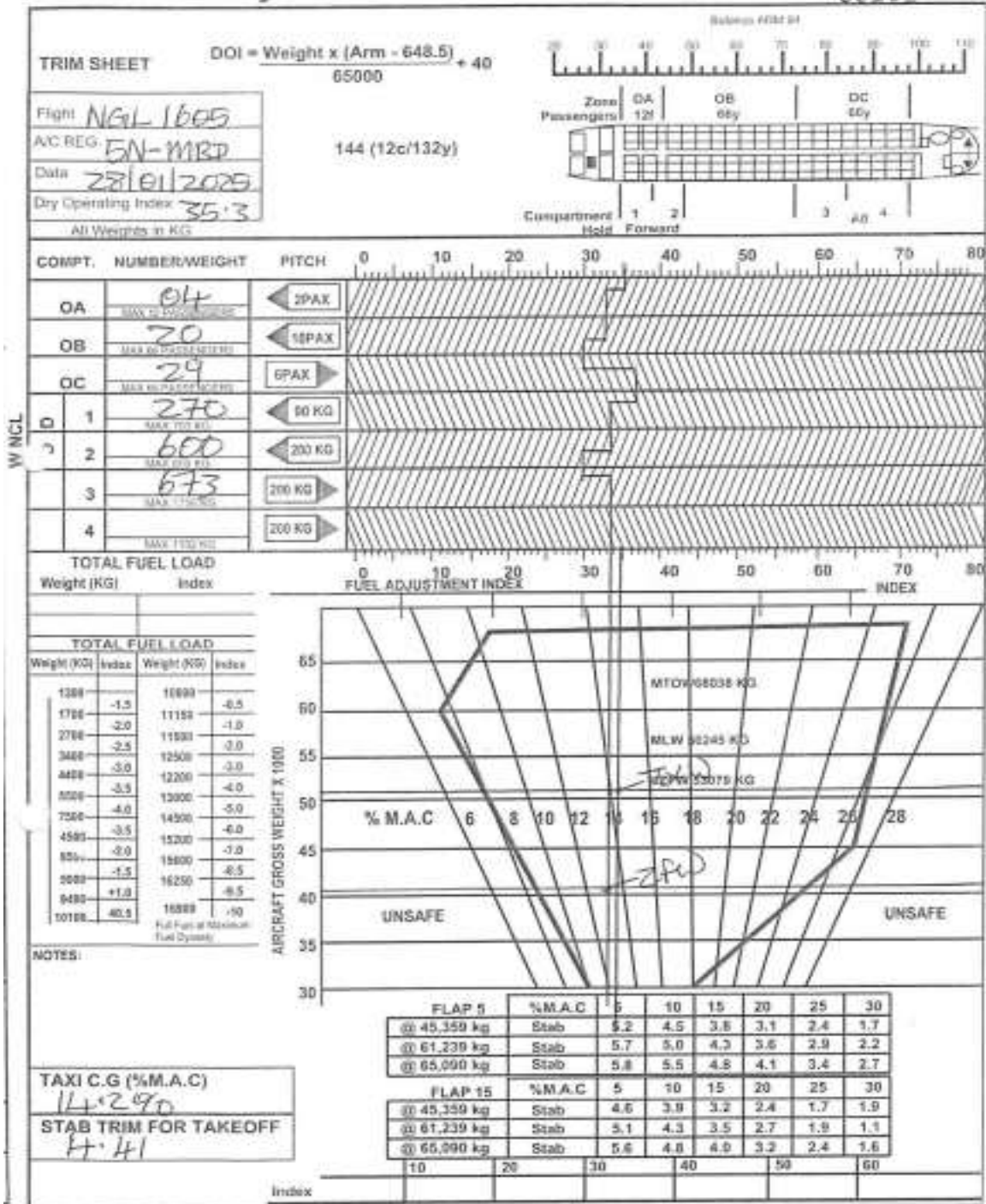


Figure 2b: Load Sheet and Balance Chart



MaxAir Ltd.
MAINTENANCE DEPARTMENT
SERVICEABLE

PART NO. 260725-1
S/N. 04709/04709
PART NAME N/W ASSY

INSTALL	REPAIR	NEW	AVR
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONT. TIME

T.S.O. _____
MFG. HONEYWELL
SHELF LIFE EXPIRES N/A

INSPECTED BY: [Signature] DATE/STAMP: 02/11/20

INSALLED IN AIRCRAFT: SN 11115
POSN: 1 STN: ABV
PART NO OF 260725 / IN OFF: 372
ENGINEER: _____ DATE: 28/01/20
SIGNATURE: [Signature]

Figure 3a: Serviceability Tag for no.1 nose wheel assembly



NON-ROUTINE AND UNIT CHANGE RECORD

A/C Reg:	Date:	Area:	STN:	Card No.	
SA-M60	08/01/25	A & G	ASV	MBD-NRC-0125-0021	
Type:	MSN:	TAT/TAC:		Raised By:	
B737-400	28704	59933108/44075		MAINT.	
DEFECT/DETAILS OF WORK:					
# 1 NOSE WHEEL FREE WORN TO LIMIT					
ACTION TAKEN:					
# 1 N/W ASSY REPLACED INW Assn			MECH	INSP	
32-AS-21 REV 100 pg 401 ANVA TRAINA SAIU			[Signature]	JL	
FACTOR-1					
PARTS REPLACEMENT RECORD					
Description	Part No. On	Part No. Off	Ser. No. Off	Ser. No. On	T/LOG/UCV No.
1 N/W ASS-1	2607825-1	2607825-1	0572	64707	0046667
The work recorded has been carried out in accordance with the requirements of the Nigerian Civil Aviation Regulations (Nig.CARs part 68&9) for the time being in force, and in that respect the aircraft/component is considered ready for release to service.			Card Source	RII INSP (If required) sign & Stamp	
			N/A	N/A	

Form: MAX/MTC-025

Oct 22

Figure 3b: Non-routine and unit change record for no 1 nose wheel assembly



NON-ROUTINE AND UNIT CHANGE RECORD

A/C Reg:	Date:	A/pt:	STN:	Card No.	
5N-MBA	28/11/25	126 G	AGV	N/A	
Type:	MSN:	TAT/TAC:	44035	Raised By:	
B737-400	287044	2990228		MAINT	
DEFECT/DETAILS OF WORK:					
H 2 NOSE WHEEL ASSEMBLY TO FAIL					
ACTION TAKEN: H 2 NW ASSEMBLY REPLACED IN AMMUNITION BAY 28-45-01. REV 102 P5 401 AND FOUND SATISFACTORY					
				MECH	INSP
				AGV	JA
PARTS REPLACEMENT RECORD					
Description	Part No. On	Part No. Off	Ser. No. Off	Ser. No. On	T/LOG/UCV No.
H 2 NW ASSEMBLY	2607826-1	2607825-1	B-13031	B-4467	0046667
The work recorded has been carried out in accordance with the requirements of the Nigerian Civil Aviation Regulations (Nig.CARs part 583) for the time being in force, and in that respect the aircraft/component is considered ready for release to service.					
Card Source			RII INSP (if required) sign & Stamp		
MBD-NRC-0125-0021			N/A		

Form: MAX-NTCC-005

Oct 22

Figure 3c: Non-routine and unit change record for no 2 nose wheel assembly



NSIB
MaxAir Ltd.
MAINTENANCE DEPARTMENT
SERVICEABLE

PART NO: 2607825-1
S/N: B4767/B4467
PART NAME: N/W ASSY

O/HALL	REPAIR	NEW	A/R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONT. TIME

T.S.G.
MFG: HONEYWELL
SHELF LIFE EXPIRES: N/A
INSPECTED BY: R DATE/STAMP: 28/11/25

INSTALLED IN AIRCRAFT: SM - IV 155
POSN: 5 SN: X125
PART NO OF 2607825-1 SN OFF: 6-7331
ENGINEER: ELM DATE: 28/11/25

Figure 3d: Serviceability Tag for no.2 nose wheel assembly