

REPUBLIC OF LIBERIA
Aircraft Accident Investigation Bureau



PRELIMINARY REPORT

ON SERIOUS INCIDENT INVOLVING RAM BOEING 737-800
AIRCRAFT CN-RGW WHICH OCCURRED AT **ROBERTS**
INTERNATIONAL AIRPORT (GLRB), LIBERIA ON
AUGUST 17, 2024



AAIB Team

*Republic of Liberia, Aircraft Accident Investigation Bureau (AAIB)
James Spriggs-Payne Airport, Monrovia, Liberia*



**PRELIMINARY REPORT ON SERIOUS INCIDENT INVOLVING RAM BOEING 737-800
AIRCRAFT OWNED AND OPERATED BY ROYAL AIR MAROC WITH NATIONALITY AND
REGISTRATION MARKS CN-RGW WHICH OCCURRED AT ROBERTS INTERNATIONAL
AIRPORT (GLRB), LIBERIA, ON AUGUST 17, 2024.**

Registered owner and operator: Royal Air Maroc

Aircraft type and model: Boeing 737-800

Manufacturer: The Boeing Company, USA

Date of manufacture: 2017

Nationality and registration marks: CN-RGW

Serial number: 41350

Location: Left side of Runway 04 approximately 4000 ft from the
threshold, Roberts International Airport (GLRB), Liberia

Date and time: August 17, 2024, at 05:15 h

All times in this report are local time (UTC) unless otherwise stated

INTRODUCTION

The Liberia Aircraft Accident Investigation Bureau (AAIB) was notified by the Liberia Civil Aviation Authority (LCAA) personnel at Roberts International Airport of this occurrence via phone call on August 17, 2024. Investigators were dispatched and arrived at the scene on the same day.

The Liberian Aircraft Accident Investigation Bureau commenced investigation into the circumstances of the occurrence under the provisions of Annex 13 of International Civil Aviation Organization (ICAO) and Doc. 9756. 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, harvesting of evidence and a preliminary inspection of the aircraft.

The investigation is ongoing.



1.0 FACTUAL INFORMATION

1.1 History of the flight

On August 17, 2024, Royal Air Maroc flight AT567, departed Mohammed V International Airport (GMMN) in Casablanca for Roberts International Airport (GLRB) in Monrovia. The flight had 70 passengers on board with 6 crew members. The Captain was the Pilot Flying (PF) while the First Officer was the Pilot Monitoring (PM).

At 04:28.03 h, RAM 567 contacted Bamako Area ATC and reported flight level 380 and requested to proceed to RNAV waypoint BOAKA for runway 22. Bamako Duty Air Traffic Controller responded and advised RAM 567 to “continue straight ahead” for runway 22 and to contact Roberts Area CONTROLLER on 128.1.

At 04:28.50 h, RAM 567 contacted Roberts Area CONTROLLER and the CONTROLLER responded, “FIVE SIX SEVEN GOOD MORNING TIME ZERO FOUR TWO NINE FLYING INBOUND ROBERTS AS PLANNED ROUTE FLIGHT LEVEL THREE EIGHT ZERO REPORT ESTIMATE NANAN CORRECTION REPORT ESTIMATE PONKA REPORT ETA ROBERTS.” RAM 567 responded, “WE ESTIMATE ERH PONKA AT ZERO FOUR FIVE FOUR AND LANDING AT ZERO FIVE ONE FOUR ROYAL MAROC FIVE SIX SEVEN AND MAY WE PROCEED TO BOAKA FOR RUNWAY TWO TWO TO POSITION ROYAL MAROC FIVE SIX SEVEN.” Roberts Area CONTROLLER then advised RAM 567 to proceed direct BOAKA and estimate BOAKA. RAM 567 estimated BOAKA at 05:09 h and the Roberts Area CONTROLLER advised them to report when ready for descent.

At 04:30:25 h, RAM 567 contacted Roberts Area CONTROLLER and requested the current weather. Roberts Area CONTROLLER responded, “ROBERTS WEATHER TIME ZERO FOUR THREE ZERO ZULU WIND IS CALM VISIBILITY ONE ZERO KILOMETERS BROKEN CLOUDS ONE THOUSAND TWO HUNDRED FEET FEW C B DIRECTION SOUTH WEST AT TWO THREE ZERO ZERO FEET TEMPERTAURE TWO FOUR DEW POINT TWO THREE (QNH) ONE ZERO ONE THREE RUNWAY ZERO FOUR REPORT READY FOR DESCENT.” At this point, Roberts Area CONTROLLER switched from runway 22 to runway 04. RAM 567’s crew immediately begin to have a conversation in French and/or Arabic, however, once the translation of that portion of the transcript becomes available, the content will then be determined.

At 04:48:49 h, RAM 567 contacted Roberts Area CONTROLLER and requested descent. At 04:49:08 h Roberts Area CONTROLLER responded, “MAROC FIVE SIX SEVEN DESCEND TO FLIGHT LEVEL ONE ZERO ZERO REPORT PASSING ONE FOUR ZERO.” At 05:01:54 h RAM 567 contacted Roberts Area CONTROLLER to report approaching flight level 140. Roberts Area CONTROLLER responded, “CONTACT APPROACH ONE TWO FOUR DECIMAL FIVE SAFE LANDING.”

At 05:02:13 h, RAM 567 contacted Roberts Approach CONTROLLER, “ROBERTS APPROACH GOOD MORNING ROYAL MAROC FIVE SIX SEVEN FLIGHT LEVEL ONE FOUR ZERO DESCENDING ONE HUNDRED TO BOAKA.” Roberts Approach CONTROLLER responded at 05:02:25 h, “AIR MAROC SIX SEVEN CLEARED VIA BOAKA ARRIVAL TO EXPECT R N A V APPROACH RUNWAY TWO TWO CONTINUE DESCENT TO THREE THOUSAND ONE HUNDRED FEET ROBERTS (QNH) ONE ZERO ONE THREE REPORT POSITION BOAKA.” RAM 567 responded, “ROYAL MAROC FIVE SIX SEVEN WE NOTICE BY THE CONTROL RUNWAY ZERO FOUR IN USE WE PROCEED TO RUNWAY ZERO FOUR ROYAL MAROC FIVE SIX SEVEN.” At this stage, Roberts Approach CONTROLLER is clearing the aircraft for an RNAV



approach to runway 22, however, the crew responds that they have been cleared to runway 04 by the previous Roberts Area CONTROLLER and so they request runway 04.

At 05:02:51 h, Roberts Approach CONTROLLER responds to RAM 567, "MAROC PASSING SEVEN ERH CLEARED RUNWAY ZERO FOUR VIA R R C H Y FOR I L S RUNWAY ZERO FOUR CONTINUE DESCENT FOUR THOUSAND FEET FOUR THOUSAND FEET ON (QNH) ONE ZERO ONE THREE REPORT R R C H Y." Roberts Approach CONTROLLER clears the aircraft for an ILS approach for runway 04 via RNAV waypoint RRCHY. At 05:03:11 h, RAM 567 responds, "WE CONTINUE FOUR THOUSAND FEET ON (QNH) ONE ZERO ONE THREE AND ERH WE PROCEED ERH FOR POSITION CONFIRM TO WHICH POINT." Roberts Approach CONTROLLER then responds by spelling out the RNAV waypoint for clarity, "ROMEO ROMEO CHARLIE HOTEL YANKEE." RAM 567 confirms the copy and repeats the RNAV waypoint.

At 05:04:54 h, RAM 567 contacted Roberts Approach CONTROLLER requesting an abbreviated approach to line up with the ILS for runway 04, "ROYAL MOROC FIVE SIX SEVEN MAY WE PROCEED TO FINAL LEFT TURN TEN MILES BEFORE R R C H Y?" Roberts Approach CONTROLLER responds at 05:05:01 h, "*** SAY AGAIN." RAM 567 repeats the request and Roberts Approach CONTROLLER responds at 05:05:10 h, "ARH ROGER." Roberts Approach CONTROLLER then asks RAM 567 for their flight level passing and they report it to be flight level 100.

At 05:05:19 h, Roberts Approach CONTROLLER contacts RAM 567, "*** CONTINUE DESCENT THREE THOUSAND FEET ON (QNH) ONE ZERO ONE THREE AND CLEARED TEN MILES FINAL APPROACH RUNWAY ZERO FOUR REPORT ESTABLISHED INBOUND." RAM 567 responds at 05:05:31 h, "DESCEND THREE THOUSAND FEET (QNH) ONE ZERO ONE THREE CLEARED I L S ZERO FOUR AND CALL ESTABLISHED AND PLEASE CONFIRM RADAR CONTACT FOR ROYAL MAROC FIVE SIX SEVEN." Roberts Approach CONTROLLER does not respond and RAM 567 calls again at 05:05:48 h, "ROBERTS ROYAL MAROC FIVE SIX SEVEN DO YOU HAVE RADAR CONTACT?" Roberts Approach CONTROLLER responds at 05:05:54 h, "ARH SAY AGAIN." RAM 567 responds at 05:05:56 h, "DO YOU HAVE RADAR CONTACT ROYAL MAROC FIVE SIX SEVEN?" Roberts Approach CONTROLLER responds at 05:05:59 h, "NO, LIGHT RAIN BUT IT HAS STOPPED." RAM 567 then responds as follows, "ARH WE WILL CALL YOU ON FINAL ZERO FOUR ROYAL MAROC FIVE SIX SEVEN."

At 05:06:11 h, RAM 567 Captain then takes over communications and contacts Roberts Approach CONTROLLER, "PLEASE WE ARE ASKING YOU OF RADAR CONTACT DO YOU HAVE RADAR CONTACT?" Roberts Approach CONTROLLER responds at 05:06:21 h, "I DON'T HAVE CONTACT WITH WHOEVER AIRCRAFT." RAM 567's Captain continues communication and at 05:06:25 h, he calls Roberts Approach CONTROLLER again, "DO YOU HAVE CONTACT CONFIRM POSITIVE CONTACT?" Roberts Approach CONTROLLER responds, "CONTACT WITH ROBERT CONTROL?" RAM 567's First Officer then takes back communications and responds at 05:06:34 h, "DISREGARD FIVE SIX SEVEN WILL CALL YOU ON FINAL RUNWAY ZERO FOUR." Subsequent to this exchange, the crew then begins to speak again in French and/or Arabic for approximately one minute.

At 05:07:47 h, RAM 567 contacts Roberts Approach CONTROLLER again regarding radar vectoring, "AND ERH ROYAL MAROC FIVE SIX SEVEN REQUEST RADAR VECTORING." Roberts Approach CONTROLLER responds, "CONFIRM REQUESTING FURTHER DESCENT." RAM 567 responds, "REQUEST RADAR VECTORING RADAR VECTORING ROYAL MAROC FIVE SIX SEVEN."



At 05:08:11 h, RAM 567 contacted Roberts Approach CONTROLLER, "*** WILL CALL YOU ON FINAL ZERO FOUR ROYAL MAROC FIVE SIX SEVEN." Roberts Approach CONTROLLER responds, "CAN I READ THE ZERO FIVE ZERO ZERO WEATHER?" And RAM 567 answers, "NEGATIVE WILL CALL YOU ON FINAL ROYAL MAROC FIVE SIX SEVEN AND **." Immediately after this exchange, the crew of RAM 567 has another one minute conversation in French and/or Arabic.

At 05:09:33 h, Roberts Approach CONTROLLER contacts RAM 567, "AIR MAROC FIVE SIX SEVEN BE ADVISED CURRENT VISIBILITY SIX KILOMETERS IN LIGHT RAIN." To which RAM 567 acknowledges. The crew of RAM 567 again has another one minute conversation in French and/or Arabic.

At 05:12:20 h, RAM 567 contacts Roberts Approach CONTROLLER regarding ILS, "ROYAL MAROC FIVE SIX SEVEN CONFIRM I L S SERVICEABLE RUNWAY ZERO FOUR." Roberts Approach CONTROLLER responds, "ACCORDING TO TECHNICIAN REPORT." RAM 567 then responds, "WE HAVE NO I L S SIGNAL ROYAL MAROC FIVE SIX SEVEN." Roberts Approach CONTROLLER then refers RAM 567 back to RNAV waypoint, "FIVE SIX SEVEN REPORT D U C O R FOR R N A V RUNWAY ZERO FOUR." To which RAM 567 responded, "I WILL CALL YOU BACK." The RAM 567 crew begin to have a conversation in French and/or Arabic while going through their checklist.

At 05:14:00 h, RAM 567 contacts Roberts Approach CONTROLLER, "SHORT FINAL SHORT FINAL SHORT FINAL ROYAL MAROC FIVE SIX SEVEN." Roberts Approach CONTROLLER responds, "AIR MAROC CONFIRM YOU HAVE THE RUNWAY IN SIGHT." To which RAM 567 confirms that they have the runway in sight. Roberts Approach CONTROLLER then gives them the wind and clears them to land at 05:14:11 h, "RAM FIVE SIX SEVEN WIND TWO THREE ZERO DEGREES AT ZERO SIX KNOTS CLEARED TO LAND RUNWAY ZERO FOUR CLEARED TO LAND."

The autopilot disengages at 05:14:21 h, and the crew of RAM 567 goes through their landing checklist. The sink rate warning goes off and at 05:15:04 h, The Captain of RAM 567 calls for wipers, "VISIBILITY WIPERS WIPERS WIPERS," and the First Officer responds, "WIPERS MAXIMUM" to which the Captain again asks twice, "IS IT THE MAXIMUM?" and the First Officer responds, "WIPERS IS IT THE MAXIMUM."

At this stage, RAM 567 touches down and the Captain informed the investigators during the interview that there was a sudden gush of heavy rain shower that completely blinded them during landing roll out and caused them to lose situational awareness momentarily. During the gush of sudden rain shower after touch down to the left of the centerline on runway 04, the aircraft briefly veered off to the left side of the runway where two of the tyres of the left landing gears temporarily left the runway for nearly 500 feet parallel to the runway and then returned to the runway. The aircraft then continued taxiing to the end of the runway and exited via Taxiway A to the terminal and disembarked the passengers without injuries or fatalities. One of the ground crew called the RAM 567 crew and asked them to send the engineer down to observe the debris that had accumulated on the left landing gear and left engine.



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	70	76	Nil
Total	6	70	76	Nil

1.3 Damage to aircraft

There were six dents on the Left-Hand Fuselage Skin between Stations 787F to 787I, dent with crack on left hand inboard of trailing edge flaps, left hand fuselage emergency lens broken, the lavatory service panel was missing, three dents on the Left-Hand Horizontal Stabilizer Leading Edge Skin, and a crack on the Left-Hand Wing Inboard Aft Flap Lower Skin.

1.4 Other damage

Two broken runway edge lights (L13, L21) and chipping to the runway edges.

1.5 Personnel information

1.5.1 Captain

Nationality:	Moroccan
Age:	57 years
Licence type:	ATPL 355, Valid till September 30, 2024
Aircraft ratings:	B737-700/800/900
Medical certificate:	Valid till September 30, 2024
Simulator:	Valid till September 30, 2024
Instrument rating:	Valid till September 30, 2024
Total flying time:	17,892+ h
Total on type:	15,458+ h
Last 90 days:	463 h
Last 28 days:	109 h



Last 24 hours: Nil

1.5.2 First Officer

Nationality: Moroccan

Age: 34 years

Licence type: CPL1134, Valid till May 31, 2025

Aircraft ratings: B-737/700/800/900

Medical certificate: Valid till October 31, 2024

Simulator: Valid till November 30, 2024

Instrument rating: Valid till May 31, 2025

Total flying time: 2735 h

Total on type: 1154 h

Last 90 days: 214 h

Last 28 days: 82 h

Last 24 hours: Nil

1.6 General Information

1.6.1 Aircraft Information

Type: 737-8SM Series

Manufacturer: The Boeing Company, USA

Date of manufacture: 2017

Serial no: 41350

Registered operator: Royal Air Maroc

Registration number: CN-RGW

Certificate of Airworthiness: Issued November 30, 2023

Certificate of Insurance: Valid til December 1, 2024

Certificate of Registration: Issued December 30, 2023



Radio Station Authorization: Valid till February 20, 2023

Airframe time: 16965 h

Cycles since new (CSN): 7345 h

1.6.2 Engines

	No. 1	No. 2
Engine model	CFM 56-7BE	CFM 56-7BE
Manufacturer	CFM	CFM
Year of manufacture	December 12, 2016	November 12, 2016
Serial number	864841	864846
Time Since New	14093	14093
Cycles Since New	5976	5976

Fuel type used: Jet A-1

1.7 Meteorological Information

Time: 0430Z

Wind: 0000(calm)

Visibility: 10 km

Cloud: Broken (BKN) 1200 feet

Broken cloud: FEW CB 2,300FT

Temperature: 24°C

Dew Point: 23°C

QNH: 1013.0hPa

CB Direction: SW

TREND: NOSIG

Relative Humidity: 96%

Time: 0500Z

Wind: 230.06kt

Visibility: 6 km (60RA, rain drizzle)

Cloud: FEW BKN 500ft, BKN 1,200ft

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Broken cloud: FEW BKN CB 2,300FT

Temperature: 24°C

Dew Point: 23°C

QNH: 1013.1hPa

CB Direction: SE/SW

TREND: NOSIG

Relative Humidity: 96%

Time: 0530Z

Wind: 250.05kt

Visibility: 6 km

Cloud: FEW BKN 500ft, BKN 1,200ft

Broken cloud: FEW BKN CB 2,300FT

Temperature: 24°C

Dew Point: 23°C

QNH: 1013.3hPa

CB Direction: SE/SW

THREND: NOSIG

Relative Humidity: 96%

1.8 Aids to Navigation

VHF 128.1 MHz (ROB ACC) – “Serviceable”

VHF 118.3 MHz (ROB Tower) – “Serviceable”

VHF 124.5 MHz (ROB Approach CTL) – “Serviceable”

VHF 121.9 MHz (ROB Ground) – “Serviceable”

VHF 113.8 MHz “ROB” VOR/DME – “Serviceable”

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VHF 110.3 MHz (ILS) “ROB SK” – “Unserviceable”



1.9 Communications

There was communication between the crew and relevant Air Traffic Control units on the following frequencies: Roberts Area Control 128.1 MHz, Roberts Approach Control 124.5 MHz, Roberts Tower 118.3 MHz , Roberts Ground 121.9 MHz.

1.10 Aerodrome Information

Roberts International Airport is the only international airport in Liberia and is managed by the Liberia Airport Authority (LAA). The Liberia Airport Authority is responsible for providing equipment, infrastructure and maintenance to the Air Traffic Services while the Air Traffic Controllers are employees of the Liberia Civil Aviation Authority (LCAA). The Roberts Flight Information Region also has Area controllers that control the upper airspace. The airport is located in Margibi County. The airport has an aerodrome reference point(ARP) of latitude 6.23379 and longitude -10.36230 with an elevation of 31 ft / 9.45 m. Located near the town of Harbel in Margibi County, the single runway airport is about 35 miles (56 km) east of the nation's capital of Monrovia, and as an origin and destination point is referred to as "Monrovia." The airport has one runway: 04/22. The ICAO airport code of this field is GLRB. The airport's IATA code is ROB. The airport is in the Roberts Flight Information Region. Runway 04 which is 11,000 ft x 150 ft has an Instrument Landing System (ILS) with frequency VHF 110.3 MHz with centerline edge threshold high intensity CAT I lighting system. Runway 04/22 is equipped with PAPIs. A VOR/DME is located at GLRB with frequency VHF 113.8 MHz.

1.11 Flight Recorders

The aircraft was fitted with the Cockpit Voice Recorder (CVR) and a Flight Data Recorder (FDR), with the following particulars:

	Cockpit Voice Recorder
Model	SSCVR
Part Number	980-6032-003
Serial Number	CVR-05381
Manufacturer	Honeywell
Channels	Four (4)

	Flight Data Recorder
Model	SSFDR
Part Number	980-4750-009
Serial Number	FDR-01152
Manufacturer	Honeywell

The recorders were retrieved at Roberts International Airport and hand-carried to the BEA facilities in Rabat, Morocco. The data was downloaded on 7 October 2024. The raw data, in



DLU format, was uploaded to a secure portal and made available to the Nigerian Safety Investigation Bureau (NSIB) for further analysis.

In addition, the Royal Air Maroc had earlier availed the investigations contents of the Quick Access Recorder (QAR) in a spreadsheet format.

1.12 Wreckage and Impact Information

The aircraft touched down on the left side of the centre line on runway 22 within the touchdown zone. On landing rollout the aircraft veered further left until the left main landing gear moved off of the runway and entered into the grass and travelled for approximately 500 feet before returning to the runway. Two runway lights were broken as a result of the excursion. Clear tire marks were observed leaving the runway and creating a rut in the ground adjacent to the runway before returning to the runway.

There were six dents on the Left-Hand Fuselage Skin between Stations 787F and 787I, the lavatory service panel door was missing, three dents on the Left-Hand Horizontal Stabilizer Leading Edge Skin, and a crack on the Left-Hand Wing Inboard Aft Flap Lower Skin.

1.13 Medical and Pathological Information

Toxicological tests were not conducted on the crew.

1.14 Fire

There was no fire.

1.15 Survival Aspect

The occurrence was survivable in that the passenger restraint system (seat belts and shoulder harnesses) were intact and there was liveable volume for the occupants.

1.16 Test and research

Nil.

1.17 Organisational and management information

Royal Air Maroc is a commercial air operator based in Casablanca, Morocco.

1.18 Additional Information

- The aircraft was manufactured in 2017 and is 7 years old.
- There were no tire blowouts.
- The two tires on the right hand landing gear and the two tires on the nose landing gear remained on the runway throughout the landing roll.

Initial Findings



1. The Roberts International Airport has no aerodrome certificate issued by the Liberia Civil Aviation Authority (LCAA) per Annex 14 and LCAR Part 14 to ensure compliance with international standards.
2. All Instrument Flight Procedures Approaches to Roberts International Airport were suspended as of June 14, 2022, and were no longer in force at the time of the incident.
3. The license of one of the Roberts FIR Area CONTROLLERS on duty was invalid due to medical certificate expiration date.
4. The license of the LCAA Roberts Approach CONTROLLER on duty was invalid due to medical certificate expiration.
5. The incident was not reported by the RAM 567 crew to the ATC after landing.
6. There were several misinterpretations in the communications between the crew and the LCAA Roberts Approach CONTROLLER during the descent, approach, and landing phases of the flight and the crew did not readback some of the clearances issued by the LCAA Roberts Approach CONTROLLER.
7. The crew abbreviated the approach to runway 04 bypassing RNAV waypoints RRCHY and DUCOR as cleared by the LCAA Roberts Approach CONTROLLER.
8. The crew reported to the LCAA Roberts Approach CONTROLLER at 05:12:29 h that they were receiving no signal from the ILS.
9. The wind provided by the LCAA Roberts Approach CONTROLLER received from the AWOS did not correspond with the wind recorded from the FDR, resulting in a crosswind landing.
10. The aircraft touched down on the left side of the centerline of runway 04 per the Automatic Dependent Surveillance-Broadcast data.
11. The crew stated that prior to their departure from Casablanca, they were unaware that all instrument flight procedures approaches to ROB had been suspended since June 14, 2022.
12. The crew was unaware that ROB did not have radar coverage.
13. The Roberts FIR Area CONTROLLER was aware that all flight procedures approaches to ROB had been suspended since June 14, 2022.
14. The LCAA Roberts Approach CONTROLLER was aware that all flight procedures approaches to ROB had been suspended since June 14, 2022, however, he was of the opinion that at some point before the incident, the procedures had been reinstated.
15. The markings on the entire runway are severely faded and difficult to see by the crew especially during landings at night.
16. The Roberts Air Traffic Control Tower had no serviceable voice recorders at the time of the incident, therefore, there were no tapes made available for transcription and analysis.
17. The Roberts Air Traffic Control Tower has no means of switching on/off or adjusting the intensity of the runway lights.
18. The Roberts Air Traffic Control Tower has no means of remotely monitoring the status of the ILS from the control tower by controllers in order to advise the crew before or during the approach to runway 04.
19. The Liberia Airport Authority's CNS Technicians have no means of remotely monitoring the status of the ILS and carry out two inspections per day (0900h and 1600h). They only rely on reports received from the aircraft through the ATC.
20. PAPI on runway 04/22 was serviceable
21. There is no radar installation at the Roberts International Airport



IMMEDIATE SAFETY RECOMMENDATIONS

Immediate Safety Recommendations 2024-001

The Liberia Airport Authority (LAA) should make immediate efforts and obtain an aerodrome certificate (license) from the LCAA ensuring that it complies with all of the standards and recommended practices of ICAO Annex 14 and LCAA recommendations.

Immediate Safety Recommendations 2024-002

The LCAA and the Roberts FIR should immediately remove from their roster any air traffic controller whose licenses are invalid due to the expiration of their class 3 medical certificate.

Immediate Safety Recommendations 2024-003

The Liberia Airport Authority (LAA) should ensure that the AWOS at the Roberts International Airport is calibrated or replaced immediately.

Immediate Safety Recommendations 2024-004

The Liberia Airport Authority (LAA) should repaint all runway markings with ample reflective glass beads to ensure visibility during minimum weather conditions. Additionally, they should install centerline lighting on the full length of the runway.

Immediate Safety Recommendations 2024-005

The Liberia Airport Authority (LAA) should immediately make serviceable or replace the voice recorder equipment installed in the air traffic control tower.

Immediate Safety Recommendations 2024-006

The Liberia Airport Authority (LAA) should immediately provide means by which the air traffic controller can switch on/off and adjust the intensity of all runway lights.

Immediate Safety Recommendations 2024-007

The Liberia Airport Authority (LAA) should immediately install equipment within the control tower to enable the air traffic controllers to remotely monitor the status of the ILS and other NAVAIDS at all times. The CNS technicians should also have the same capability to remotely monitor the status of all NAVAIDS at all times.

Immediate Safety Recommendations 2024-008

The operator, Royal Air Maroc, should ensure that they receive all NOTAMS published by the Roberts FIR Central AIS Office once they are promulgated in order that they may be included in the pilot briefing before departure from Casablanca.

Immediate Safety Recommendations 2024-009

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The Liberia Airport Authority (LAA) should make immediate efforts and obtain a radar within one year.



Figure 1: A view of the lavatory compartment with missing panel cover



Figure 2: A view of Runway 04 left shoulder showing the aircraft tire tracks leaving the runway



Figure 3: View of rut created by left two tires of the left landing gear on edge of runway 04



Figure 4: Debris on left landing gear strut



Figure 5: Damage to left side fuselage skin



Figure 6: Dent on the left hand horizontal stabilizer leading edge skin with speed tape

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Figure 7: Crack to left hand wing inboard aft flap lower skin covered by speed tape



Figure 8: Dent created on the left hand horizontal stabilizer leading edge skin