SPEECH OF THE COMMISSIONER/CEO OF ACCIDENT INVESTIGATION BUREAU (AIB), AKIN OLATERU AT THE MEDIA BRIEFING ON THE RELEASE OF SIX OCCURRENCE REPORTS HELD ON 25 APRIL, 2019 AT AIB SAFETY HOUSE, MURTALA MUHAMMED INTERNATIONAL AIRPORT, LAGOS.

Gentlemen of the press,

I want to thank you for honouring our invitation to this very important occasion where we are releasing another six final accident and serious incident reports to the public just six months after we released four reports.

Safety is of great importance to us at AIB and our Investigations are geared towards having a safe airspace for air travellers globally. These reports are collectively a strong pillar of safety in the aviation industry and timely release is as critical as Accident Investigation itself.

The purpose of accident investigation, however, is not to apportion blame or liability but to prevent future recurrence of similar incidents. Such preventive mandate, however, cannot be achieved without relevant stakeholders having timely access to accident investigation reports and draw safety lessons that can be applied to mitigate future reoccurrence of similar events.

The release of these final accident and serious incident reports is in line with our promise at the inception of this administration in AIB that the outstanding occurrence reports would be cleared swiftly even as new accident investigation reports will be released without delay.

We are today making available to the public the outcome of our investigations into four accidents and two serious incidents.

These **6 Final Reports** have generated a total of **24 Safety Recommendations**, which are addressed to the regulatory body, affected airlines and airport operators and foreign agencies.

With these reports we now have a total of **46 Final Reports** and **178 Safety Recommendations** since the inception of AIB.

These Safety Recommendations are very important towards preventing reoccurrence of similar accidents or serious incidents and when adhered to can impact air safety positively, not only in Nigeria but also globally.

Below is a breakdown of the reports and safety recommendations we have turned out so far.

	2007 - 2016	2017 - Date	Total
	FINAL REPORTS RELEASED		
Occurrences	19	26	45
Incident (*Safety Bulletin*)	-	1	1
Total	***19***	***27***	***46***
Percentage of Final Reports	***41.3%***	***58.7%***	
	SAFETY RECOMMENDATIONS ISSUED		
Occurrences	81	93	174
Incident (*Safety Bulletin*)	-	4	4
Total	***81***	***97***	***178***
Percentage of Safety Recommendations Issued	***45.5%***	***54.5%***	

This administration has been able to release a total of 27 Final Reports since January 2017, which makes up 58.7% of AIB's total of 46 Final Reports released since inception (2007).

The 97 safety recommendations issued since 2017 account for 54.5% of the total 178 issued since inception.

I would like to acknowledge and commend the commitment of AIB staff in achieving this milestone by turning out a total of 27 occurrence reports in the last two years. Our Investigations are now more dynamic using team approach.

Of the 37 outstanding reports inherited by the present administration, 10 reports were released in 2017 and another 10 in 2018.

With one serious incident occurring in 2017; two accidents and four serious incidents in 2018 and one accident and three serious incidents in 2019, AIB now has 22 outstanding reports.

Three of the 2018 occurrences are being released today.

We are now more committed to swift response to incident and accident notifications through our well equipped Command and Control Centre, which will be actively in use soon.

Our Mobile Application, which was introduced to interface with the public and make it easy for them to communicate with AIB digitally, thereby simplifying the process of accident reporting, is also in use.

The support of the supervisory ministry and particularly the Honourable Minister of State (Aviation) is highly appreciated.

While we are committed to prompt release of accident investigation reports, we call on all stakeholders to expedite actions on safety recommendations from our reports and act on lessons learnt from the investigations. This is the least they can do to complement AIB's efforts at enhancing air safety, without which a sustainable aviation development cannot be assured.

Please feel free to visit our website www.aib.gov.ng for full details of these reports and all other reports that we have issued in the past.

The six reports we are releasing today are as follows:

1. Report on the Accident involving a Bristow Helicopters (Nigeria) Limited Sikorsky S76C++ Helicopter with nationality and registration marks 5N-BQJ, which occurred at 77NM offshore from Murtala Muhammed Airport on 3rd February 2016.
2. Report on the Accident involving a Boeing MD-83 aircraft operated by Dana Airlines Ltd with Nationality and Registration Marks 5N-SRI, which occurred at Port Harcourt International Airport on 20th February, 2018.
3. Report on the Serious Incident involving an Airbus A330-223 aircraft operated by Delta Air Lines Inc. with nationality and registration marks N858NW, which occurred after take-off from Runway 18R, Murtala Muhammed International Airport, Lagos on 13th February 2018
4. Report on the Accident involving a Cessna 208B Caravan with Nationality and Registration Marks 5N-BMJ belonging to Ministry of Works and Transport, Taraba State Government, which occurred at Kwanan-Waya Village, Yola South Local Government Area, Adamawa State On 25th October 2012.
5. Report on the Accident involving a Diamond DA40D Aircraft operated by International Aviation College (IAC) Ilorin with Nationality and Registration Marks 5N-BRD, which occurred at Ilorin International Airport, Ilorin, Kwara State, Nigeria on 25th November, 2013
6. Report on the Serious Incident involving Gulfstream G200 Aircraft Operated by Nestoil PLC with Nationality and Registration Marks 5N-BTF, which occurred at Nnamdi Azikiwe International Airport, Abuja on 25th January, 2018

1 Report on the Accident involving a Bristow Helicopters (Nigeria) Limited Sikorsky S76C++ Helicopter with nationality and registration marks 5N-BQJ, which occurred at 77NM offshore from Murtala Muhammed Airport, Ikeja on Radial 139° On 3rd February 2016.

SYNOPSIS

On the 3rd of February, 2016, Accident Investigation Bureau was notified of the accident by the Nigerian Civil Aviation Authority (NCAA) through a phone call and investigation commenced same day. All relevant stakeholders were notified.

A Sikorsky S76 C++ helicopter with nationality and registration marks 5N-BQJ, a domestic charter flight operated by Bristow Helicopters Nigeria Ltd. departed Murtala Muhammed Airport Lagos (DNMM) with 11 passengers and 2 crew for Erha Floating Production Storage Off loading (FPSO) helideck. The Captain was the Pilot Flying (PF) while the First Officer was Pilot Monitoring (PM) on this leg of the flight.

The take-off and climb-out was normal. A few minutes into the flight, the Captain observed an unusual vibration of the aircraft and made a remark about this to the First Officer. About fifteen minutes later, the crew also reported that the Digital Auto Flight Control system (DAFCS) and TRIM FAIL lights illuminated twice and were reset. The No. 1 autopilot decoupled on both occasions. Also, according to the PM, a passenger seated in the middle row reported perceiving a burning smell. However, the aircraft continued to destination and landed. On ground Erha, the Captain conducted visual checks but could not ascertain the source of the burning smell earlier reported.

Instrument Meteorological Conditions prevailed at the time and Instrument Flight Rules (IFR) flight plan was filed.

At 09:50h, 5N-BQJ departed Erha FPSO for Lagos on the second leg of the flight with nine passengers and two crew on board, the First Officer was the PF; estimating LAG 10:40h and endurance of one hour plus thirty-five minutes maintaining an altitude of 3,000ft above mean sea level (AMSL).

Fifteen minutes into the flight, there were repeated illuminations of 'TRIM FAIL' and Digital Automatic Flight Control System (DAFCS) indications. The Emergency Operating Procedure (EOP) was consulted and it recommended that the helicopter be flown hands and feet on the control.

At 10:08h, about 75NM from LAG, initial contact was made with Lagos Approach. The Pilot Flying (PF) complained of the collective being heavy and the autopilot decoupling. There was loss of power, high rate of descent and decreasing altitude.

The Captain observed a slight turn to the right and asked the PF to check heading and the PF reported that there was problem with the compass.

The instrument readings were inaccurate and inconsistent, and the aircraft started drifting to the right.

At about 66NM on radial 145^{o} from LAG, the Captain made a distress call "MAY DAY, MAY DAY, MAY DAY" on the Approach frequency. Afterwards, the aircraft stabilized at an altitude of 1,500ft AMSL on a NE-E heading and the Captain briefed the passengers that they would have to ditch the aircraft.

At about 10:19h, 5N-BQJ made a controlled landing on water at approximately 77NM on radial 139^{o} of 'LAG VOR'. Coordinates of the position was 05^{o}45′43" N, 004^{o}13′54" E.

The investigation identified the following causal and contributory factors:

Causal Factor

The crew switched the Compass to "FREE" DG mode for Landing on the helideck at Erha FPSO, and did not return to the "SLAVE" mode after take-off, which caused the trim fail to cut off consistently, which in turn disengaged the autopilot as a result of the unsynchronised heading inputs.

Contributory Factor

1. Non-adherence to Company Operations Manual (Part B checklist) as it relates to after take-off checks.
2. The crew did not disengage the autopilot to fly the aircraft manually.

Four Safety Recommendations was made.

SAFETY RECOMMENDATIONS

Safety Recommendation 2019-020

Bristow Helicopters (Nigeria) Ltd. should ensure that annual flight recorder readout is carried out for every aircraft in their fleet in accordance with NCAAOrder 001 2014 and ICAO Annex 6 Part III.

Safety Recommendation 2019-021

Bristow Helicopters (Nigeria) Ltd. should ensure that the annual flight recorder readouts records obtained should be preserved with appropriate current data frame layout.

Safety Recommendation 2019-022

Bristow Helicopters (Nigeria) Ltd. should ensure that Flight Crew follow approved checklist items, and procedures at all times.

Safety Recommendation 2019-023

Bristow Helicopters (Nigeria) Ltd. should consider reviewing their procedure for returning crew back to flight duties after staying out of flight duty for any period up to thirty days.

CONCLUSION

16 Findings were made:

1) The flight crew were certificated and qualified to conduct the flight in accordance with applicable Nigerian Civil Aviation Regulations (Nig.CARs).
2) The helicopter was maintained in accordance with the approved maintenance programme.
3) The Helicopter was manufactured in 2007 with total Airframe Hours of 6,867h (As at 02/02/2016).
4) On the outbound flight to Erha FPSO, a passenger reported smelling a burning smell in the cabin which was not established by the crew on landing.
5) On the inbound flight to Lagos, the crew reported instrument and flight control problems with repeated TRIM FAIL and DAFCS illuminations.
6) The crew declared the first May Day call at 66NM to Lagos and later updated it.
7) Lagos Approach Control could not raise 5N-BQJ and had to rely on other aircraft in the vicinity to relay information.
8) There were eleven persons on onboard including two crew at the time of ditching.
9) The aircraft ditched in the Atlantic Ocean at 77NM and radial 139^0 from LAG.
10) The life rafts on the helicopter were deployed with the left life raft slightly damaged.
11) The Search and Rescue including evacuation of crew and passengers were promptly carried out.
12) The Helicopter capsized and was later submerged in the salty waters of the ocean while the emergency flotation devices prevented the helicopter from sinking immediately.
13) One of the two flotation bottles under the crew seats was discharged.
14) There was no evidence of fire outbreak before and after ditching.
15) Defects were discovered in the Flight Data Recording Systems.
16) Annual Flight Recording Readouts for the aircraft were not carried out.

2 Report on the Accident involving a Boeing MD-83 aircraft operated by Dana Airlines Ltd with Nationality and Registration Marks 5N-SRI which occurred at Port Harcourt International Airport on 20th February, 2018

SYNOPSIS

Accident Investigation Bureau (AIB) was notified of the accident by the Nigeria Airspace Management Agency (NAMA) on 20th February, 2018. Investigators were dispatched the following day, arrived on site at 11:00 h. All relevant stakeholders were notified accordingly.

On 20th February 2018, DANA Flight 0363 (DAN0363) a Boeing MD-83 aircraft, operated by DANA Airlines, was on a scheduled flight from Nnamdi Azikiwe International Airport (DNAA) Abuja to Port Harcourt International Airport (DNPO) on an Instrument Flight Rules (IFR) flight plan. Onboard were 44 passengers, 2 pilots, and 3 flight attendants. Initially, the First Officer was the Pilot Flying (PF) while the Captain was the Pilot Monitoring (PM).

At 18:47 h, the Captain took over control after realizing the Distance Measuring Equipment (DME) 2 was not serviceable.

The aircraft descended through approach minimums (460 feet AGL) on a localizer only approach runway 21, crossed the threshold and did a smooth touchdown on the runway at 7,972 feet from threshold. The reported wind was 360° at 22 kt. The aircraft landed without obtaining landing clearance from the ATC.

The aircraft was on the centreline until it veered off left approximately 200 feet to the end of the runway, exited the paved surface and came to a stop 978 feet from the end of the runway approximately 33 feet left of the extended centreline.

The aircraft was substantially damaged. All persons onboard were evacuated unhurt.

The accident occurred at night in Instrument Meteorological Condition (IMC).

One causal factor and three contributory factors were identified.

Causal Factor

The accident was caused by an underestimation of the degradation of weather conditions (heavy rain, visibility and strong wind on short final and landing) and the failure by the crew to initiate a missed approach which was not consistent with the company's SOP.

Contributory Factors

Other contributing factors to this accident were:

- Non-compliance to company's SOP in meeting crew competency and complement requirements.
- Ineffective two-way communication between the ATC and DAN0363 during final approach prevented the flow of technical information on runway surface condition and other relevant meteorological information essential to safety.
- Failure of the crew to crosscheck the prevailing wind and also to obtain landing clearance from the ATC during final approach after contact with ATC was restored.

Nine Safety Recommendations were made.

SAFETY RECOMMENDATIONS

4.1 Safety Recommendation 2019-011

Dana Airlines should review the guidelines for developing, implementing, reinforcing, and assessing CRM training programs for flight and cabin crewmembers, as contained in DANA Airline's Operations Manual Part D "Training" section. 2.9.5 - 2.9.5.5 and ensure that the CRM program conforms to the provisions contained in Nig.CARs 8.10.1.12.

4.2 Safety Recommendation 2019-012

Dana Airlines should amend its Operations Manual Part D section 2 "Flight Crew Training and Checking Programme", subparagraph 2.5.2.4 Line Training under Supervision, to state that:

> All flight crew members will operate a minimum number of sectors and/or flying hours whichever comes later under the supervision of a nominated check pilot who is also serving as the PIC shall occupy a pilot station.

The normal minima for Line Flying under supervision (in addition to any base training) will be:

a. Aircraft Commanders/Co-pilots on type 50 hours (minimum 20 sectors).
b. Aircraft Commanders/Co-pilots non-reducible transiting to a new aircraft type 100 hours (minimum 30 sectors).

2. For pilots with more than 500 hours on type and recent experience of equivalent jet in the area of operations, these criteria may, at the Flight Training Manager's discretion, be reduced by up to 40%.

3. Conduct risk identification, assessment and reduction processes in a structured proactive and systematic way so that it cuts across all relevant personnel, rather than relying on the crew decision-making abilities when it comes to complying with SOP.

4.3 Safety Recommendation 2019-013

Federal Airports Authority of Nigeria (FAAN) should conduct Friction Tests and de-rubberization of all active Runways under FAAN control in compliance with Part 12.6.4(d) of Nig.CARs 2007 in accordance with NCAA advisory circularNCAA-AC-ARD014 issue No.1.

4.4 Safety Recommendation 2019-014

FAAN should monitor surface friction test schedules on all operational runways on a more frequent basis, including the build-up of rubber on all runways, and perform

rubber removal operations as required, in accordance with Part 12.6.4(d) of Nig.CARs 2007.

4.5 Safety Recommendation 2019-015

FAAN should ensure the development of a comprehensive maintenance plan for runways in all airports under its control and ensure effective record keeping for every detail of maintenance carried out.

4.6 Safety Recommendation 2019-016

Nigerian Airspace Management Agency (NAMA) should amend the Manual of Air Traffic Control (MAT-C) Vol. 1, 2nd edition Chapter 4, "Windshear" Section 1, sub section 1.5 to include "Low Level Windshear Advisory," to state that Tower controllers should issue the LLWAS advisory, "Low Level Windshear Advisories in Effect," whether or not the facility is equipped with an ATIS. The advisory should continue to be transmitted by ATC, relative to all runways in operation at the airport, until either the information is confirmed to be on the ATIS, or the prescribed 10-minute time limit from the time the alert has expired.

4.7 Safety Recommendation 2019-017

NAMA should ensure that the Manual of Air Traffic Control (MAT-C), Chapter 4, "Windshear" Section 1, sub section 1.5 is appropriately revised to include "Low Level Windshear Advisory," to require controllers to select for display all sensors on the LLWAS (if installed at the airport) when adverse weather conditions, such as thunderstorms, are forecast or present in the terminal area to improve controller and pilot perception of wind conditions affecting the entire airport.

4.8 Safety Recommendation 2019-018

Nigerian Civil Aviation Authority (NCAA) should review the pilot training record keeping systems of DANA Airlines to determine the quality of information contained therein and

require the airlines to maintain appropriate information on the quality of pilot performance in training and checking.

4.9 Safety Recommendation 2019-019

NCAA should ensure that all airport operators in Nigeria conduct Runway Friction Tests regularly in accordance with Nig.CARs Part 12.

CONCLUSION

Findings

Findings as to Causes and Contributing Factors

1. The crew calculated an inaccurate V_{APP} (i.e. target approach speed), and flew the approach faster than recommended.
2. The aircraft crossed the threshold 10 knots above actual V_{REF} (i.e., threshold crossing speed), resulting in an extended flare to a touchdown far into the runway beyond one-third of the available landing distance, which was inconsistent with DANA Airline's SOP.
3. The smooth landing on a wet runway at high speed with strong tail winds led to long flare, which resulted in poor braking action and reduced aircraft deceleration, contributing to the runway overrun.
4. The crew did not initiate a Go Around when V_{REF} was exceeded by 10 KIAS.
5. The anti-skid brake system operated as designed.

Findings as to Risk

1. In the absence of information and training about ungrooved and wet/contaminated runways, there is a risk that the flight crew will not carry out the appropriate landing techniques under these conditions.
2. Without prompt reporting of an increase in rainfall intensity, flight crew cannot take into account decline in braking performance, and there is an increased risk of hydroplaning.
3. Non-adherence to standards and recommended practices by relevant authorities on periodic runway friction measurement and enhancement, such as runway grooving, increases the risk of runway overruns on wet runways.

Other Findings

1. The Captain was certified, qualified and competent to operate the flight.
2. The First Officer was certified and qualified to occupy the first officer's seat but not competent to operate the flight unsupervised.
3. The First Officer was the Pilot Flying and the Captain took control at about 12NM to touch down.
4. The aircraft was dispatched with number 2 radio altimeter inoperative.
5. The Glide slope RWY 21 was unserviceable.
6. The number 2 DME reciever was unserviceable during the approach.
7. The aircraft touched down far into the runway from the threshold.
8. There was no effective communication between the Tower and the aircraft at short finals, therefore full weather information was not passed shortly before landing. Subsequently, no landing clearance was issued to the aircraft
9. The aircraft did not also request for landing clearance.
10. The aircraft touched down in high winds of 360^{o} at 22kt indicating a tail wind of 19knots.
11. The approach speed was 10ktin excess of actual approach speed.
12. The runway surface was wet during landing roll.
13. The Public Address System did not work after the aircraft came toa complete stop.

14. The left forward main door (only) was used for the evacuation.
15. The right forward service door escape slide was not installed.
16. The left forward main door emergency escape slide was not deployed.
17. The L1 (main entry door) slide was not armed.
18. The runway approach lights and landing aids were damaged.
19. The airport operator has confirmed that no friction test has been conducted at DNPO since 2013.

3 Report on the Serious Incident involving an Airbus A330-223 aircraft operated by Delta Air Lines Inc. with nationality and registration marks N858NW which occurred after take-off from Runway 18R, Murtala Muhammed International Airport, Lagos on 13th February 2018

SYNOPSIS

On 13th February, 2018 at about 22:51h, an Airbus A330-223 aircraft with nationality and registration marks N858NW owned and operated by Delta Air Lines Inc. departed Murtala Muhammed International Airport Lagos, Nigeria for Hartsfield-Jackson International Airport, Atlanta, Georgia, United States of America, as a scheduled flight DAL55, operated on an Instrument Flight Rules (IFR)flight plan. The flight had 234 persons on board comprising two captains and two first officers; nine cabin crew members and 221 passengers including two infants.

During climb, at 22:52h and at an altitude of about 1,700ft, the fire warning on engine No. 1 activated (ON indication). At 22:52:25h, the crew contacted ATC, declared an emergency, and requested a return to the airport and for the emergency services to be on stand-by. The aircraft turned back to the airfield.

At 22:53:50h, DAL55 was cleared for landing on runway 18R. At about 22:59h, the aircraft landed safely.

The Airport Rescue and Fire Fighting Services (ARFFS) reported observing a fire in engine No.1 and attempted to extinguish it. ATC confirmed there was fire at the tail end of the engineNo.1 exhaust pipe; the Captain then ordered an evacuation. The passengers were evacuated using the emergency slides on the Right-Hand side of the aircraft. One passenger was seriously injured, and 11 passengers sustained minor injuries during the evacuation.

The incident occurred at night.

One causal factor and contributory factor were identified.

Causal Factor

An overtemperature condition and localized fire within the No. 1 engine cowling triggered a fire warning. The overtemperature and fire were caused by the ignition of fuel from a hairline crack on the fuel manifold supplying fuel nozzle 1.

Contributory factor

The fuel manifold cracking can be attributed to high vibratory stresses due to coupling of an acoustic combustor mode and a fuel manifold structural mode.

One Safety Recommendation was made.

SAFETY RECOMMENDATIONS

Safety Recommendation 2019-024

The NTSB may consider recommending to the FAA to issue an Airworthiness Directive with respect to Pratt & Whitney Service BulletinPW4G-100-A73-47 and PW4G-100-73-48 to address the fuel nozzle and fuel manifold failure modes.

CONCLUSION

10 Findings were made:

1. The flight crew were certified and qualified to conduct the flight in accordance with applicable FAA regulations.
2. The First Officer was the Pilot Flying while the Captain was the Pilot Monitoring.
3. The left engine fire warning came ON less than one minute after take-off.
4. At 22:52.25h, the flight crew contacted ATC and declared an emergency.
5. At about 22:59h, the aircraft landed safely on runway 18R.
6. At about 23:04h, the Airport Rescue and Fire Fighting Services reported smoke and later fire on the left engine.

7. There was evidence of overtemperature condition within the engine cowling, as well as a small area of fire with soot to some extent.
8. The two fire extinguishing bottles on the left engine were discharged.
9. Delta Air Lines was in compliance with the applicable Service Bulletins (SBs)/ Airworthiness Directives (ADs) at the time of the occurrence.
10. The aircraft is not equipped with a fuel-jettisoning system, and the successful landing was conducted at a weight in excess of the maximum landing weight, although the aircraft is certified for overweight landing.

4 Report on the Accident involving a Cessna 208B Caravan with Nationality and Registration Marks 5N-BMJ belonging to Ministry of Works and Transport, Taraba State Government, which occurred at Kwanan-Waya Village, Yola South Local Government Area, Adamawa State On 25th October 2012

SYNOPSIS

Accident Investigation Bureau (AIB) was notified of the accident by the Nigerian Civil Aviation Authority (NCAA) on 25th October, 2012. Investigators were dispatched the following day and commenced investigation. All relevant stakeholders were notified accordingly.

On the 25th of October, 2012 at 17:48 h, a Cessna Caravan 208B, 5N-BMJ, departed Jalingo for Yola on a Visual Flight Rules (VFR) flight plan with four Persons-On-Board (one crew and three passengers). At 18:00 h, the Airport Manager stationed at Jalingo by Taraba State Government, called Yola Control Tower (CT) by phone to advice that the aircraft had departed Jalingo for Yola.

At 18:25 h the pilot reported field in sight. CT then advised him to “continue approach and report final, wind calm” and the pilot acknowledged “will continue approach, to report final”.

At 18:27 h CT had the aircraft in sight and advised the pilot to report “final, wind calm”, the pilot acknowledged.

At 18:30 h, CT lost visual contact with 5N-BMJ and tried to raise her on radio but there was no response.

At 18:37 h, information was received from witnesses, regarding a possible plane crash at Yola-Numan Road close to Nigerian National Petroleum Corporation (NNPC) depot. This information was subsequently passed to the fire watch room. Rescue team and other security personnel were mobilized to the location of the crash. However, before the arrival of the rescue team from the airport, the locals had rescued the occupants from the wreckage.

The occupants were subsequently taken to Federal Medical Centre (FMC), Yola for medical treatment.

The accident occurred at dusk. The aircraft was destroyed.

Causal Factor

The Bureau could not conclusively determine the cause of this accident; however, the investigation identified the following factors:

- The pilot was not certified, qualified and not competent to fly the aircraft.
- The decision of the pilot to operate a VFR flight after sunset.
- Inadequate oversight by the Regulatory Authority.

Two Safety Recommendations were made.

SAFETY RECOMMENDATIONS

Safety Recommendation 2019-001

NAMA should take appropriate action to relocate the existing control tower at Yola Airport in order to enhance the aerial view of the approach path of runway 35 from the Tower.

Safety Recommendation 2019-002

NCAA should ensure all pertinent regulations with regards to the operations of the aircraft and certification of all relevant personnel and facilities of the Ministry of Works and Transport, Taraba State Government are appropriately complied with.

CONCLUSION

The following findings were made:

1. The pilot is qualified to fly Cessna 172 and has total logged flying hours of 58 hours and 40 minutes.
2. The pilot has no relevant endorsement to fly Cessna Caravan 208B.
3. The pilot does not have instrument ratings and night flight privileges.
4. The pilot reported an incorrect estimated time of arrival (ETA at Yola as 10:01 UTC as against the time 17:19 UTC.
5. The pilot reported the number of persons on board as 06 to the CT as against 04 actual persons found after the accident.
6. The flight was conducted after the sunset time in Yola on the day of accident.
7. The Control Tower was notified about 5N-BMJ departure by phone call from Jalingo after the aircraft was airborne.
8. The Bureau was unable to interview the pilot as he was flown out of the country for further medical treatment.
9. The pilot has completed training and obtained a Private Pilot Licence.
10. The aircraft engine had an occurrence of engine overheat/over temperature in December 2011. It was removed and sent to an approved engine workshop in South Africa (Vector Aerospace) for complete repair and overhaul.
11. The engine was reinstalled on the aircraft in April 2012.
12. The engine throttle lever was found below idle (beta) position at the crash site.
13. The fuel samples from both aircraft tanks meet the requirement of AFQRJOS issue 27 check list.
14. The engine exhibited contact signatures to its internal components characteristics of an engine producing power at the time of impact.
15. The engine did not display any indications of any pre-impact anomalies or distress that would have precluded normal engine operation.

16. As at the time the accident occurred, 5N-BMJ and two Bell helicopters were under the maintenance and operational control of MWTTSG.
17. MWTTSG did not have the maintenance and operational capabilities to support the operation of 5N-BMJ.
18. There was no evidence to suggest that MWTTSG had a Permit to Fly for Non-Commercial Flight (PNCF) as required by Nig.CARs part 18.2.4: Air Transport Economic Regulations.
19. Before the arrival of the rescue team to the accident site, the locals had rescued the occupants from the wreckage.
20. The investigation observed that ARFFS personnel at Yola airport have not undergone initial/recurrent physical fitness test and basic life support training.
21. The ambulance parked at the Yola fire station was unserviceable at the time of the accident.
22. The ARFFS team arrived the crash site by 19:52 h (1 hour and 20 minutes after the initial notification) and discovered that the aircraft's occupants had been rescued from the wreckage by the locals.
23. The terminal building being renovated at Yola airport is obstructing the view of the approach path of runway 35 from the Control Tower.

5 Report on the Accident involving a Diamond DA40D Aircraft operated by International Aviation College (IAC) Ilorin with Nationality and Registration Marks 5N-BRD which occurred at Ilorin International Airport, Ilorin, Kwara State, Nigeria On 25th November, 2013

SYNOPSIS

Accident Investigation Bureau (AIB) was notified of the accident by the Nigerian Accident Investigation Bureau (AIB) was notified of the accident by the International Aviation College (IAC) on 25th November, 2013. Investigators were dispatched the following day and commenced investigation into the circumstances surrounding the occurrence.

At 11:34 h, 5N-BRD on a Private Pilot License (PPL) Check Ride, departed runway 05, Ilorin International airport and commenced initial climb. During after-take off checks (i.e. landing light off, flaps up and climb power was set), at about 1,600ft above mean sea level (AMSL) in climb, the load percentage decreased to 65%, engine RPM dropped drastically and subsequently the engine failed.

The Safety Pilot (SfP) took over control of the aircraft, verified that the throttle was at full power position, tried restarting the engine but the engine failed to restart. He commenced air return to the airfield and declared emergency, trimmed the aircraft to glide at a speed of 75kt.

The aircraft force-landed short of runway 23 to the right and came to a stop, 596m from the threshold. All the three occupants evacuated unhurt.

The accident occurred in daylight.

One causal factor and one contributory factor were identified.

Causal Factor

Loss of engine power during initial climb caused by insufficient air supply into the inlet manifold due to constriction of the inner layer of the flexible hose connecting the alternate air valve to the turbocharger air inlet.

Contributory Factor

Poor maintenance practice as regards non-compliance with EASA AD No.: 2012-0024 for the replacement of the Turbocharger hose.

Four Safety Recommendations were made;

SAFETY RECOMMENDATIONS

Safety Recommendation 2019-003

IAC should ensure strict compliance with implementation of applicable Airworthiness Directives.

Safety Recommendation 2019-004

IAC should ensure disposal of drained fuel is in conformity with environmental protection requirements.

Safety Recommendation 2019-005

IAC should ensure flight crew report to technical department of any contamination found in fuel drained more than three times during pre-flight inspection in accordance with the DA40 AMM chapter 12-10-00 page 4 (SERVICING), (B) Fuel Contamination Test Procedure.

Safety Recommendation 2019-006

NCAA should ensure that IAC complies with recommendations 4.1, 4.2, and 4.3, viz,

a) Applicable Airworthiness Directives.
b) DA40 AMM chapter 12-10-00 page 4 (SERVICING), (B) Fuel Contamination Test Procedure.

CONCLUSION

7 Findings were made:

1. The flight was a PPL Certification flight.
2. The aircraft was first acquired by CabAir in UK, registered as G-OCCO and maintained by Apollo Aviation.
3. Diamond Aircraft Industry issued MSB D4-088, MSBD4-075/1 dated 30th January, 2012 on Inspection and Replacement of Turbocharger Hose.
4. European Aviation Safety Agency (EASA) issued an AD No. 2012-0024 dated3rd February 2012on Power Plant-Turbocharger Hose-Inspection/Replacement.
5. The aircraft came under Nigeria registration in June 2013 and was registered as 5N-BRD.
6. The aircraft had a valid Certificate of Airworthiness at the time of the accident.
7. The Turbocharger Inlet hose found installed on the aircraft was the “NOT suitable” one as specified in EASA AD No.: 2012-0024.

6 Report on the Serious Incident involving Gulfstream G200 Aircraft Operated by Nestoil PLC with Nationality and Registration Marks 5N-BTF which occurred at Nnamdi Azikiwe International Airport, Abuja On 25thJanuary, 2018

SYNOPSIS

Accident Investigation Bureau (AIB) was notified by Abuja ATC at 15:28 h on 25th January, 2018 of an accident involving a NestoilPlc Gulfstream 200 (G200), with nationality and registration marks 5N-BTF on Runway 22 of Nnamdi Azikiwe International Airport, Abuja.

Air Safety Investigators were dispatched to the scene of the accident and investigation commenced immediately. All stakeholders were duly notified.

The aircraft was operating a charter flight, on an Instrument Flight Rules (IFR) flight plan, with four passengers and three flight crew members onboard.

The Captain was the Pilot Flying (PF) and the Co-pilot was the Pilot Monitoring (PM).

At 14:28 h, the Gulfstream 200 (G200), with nationality and registration marks 5N-BTF, took off from Murtala Muhammed InternationalAirport, Lagos (DNMM).At 15:18 h, it landed Nnamdi Azikiwe International Airport Abuja (DNAA)Runway 22, lost control during the landing roll and came to a stop on the right shoulder of the runway with the right main landing gear broken.

The ATC immediately notified the Aircraft Rescue and Fire Fighting Services (ARFFS), Approach Radar Control and other relevant agencies about the occurrence. All persons on board disembarked normally with no injuries.

The serious incident occurred in daylight.

One causal factor and one contributory factor were identified.

Causal Factor

The use of improper directional control techniques to maintain the aircraft on the runway.

Contributory Factor

Improper coordination in taking over control of the aircraft by the PM, which was inconsistent with the SOP.

Four Safety Recommendations were made;

SAFETY RECOMMENDATIONS

Safety Recommendation 2019-007

Nestoil Plc should ensure that the crew involved in the accident undergo CrewResource Management training.

Safety Recommendation 2019-008

Nestoil Plc should review the crew training on handling techniques and characteristics of the aircraft during landing roll.

Safety Recommendation 2019-009

NCAA should ensure compliance to safety recommendations 4.1 and 4.2 above.

Safety Recommendation 2019-010

FAAN should ensure that recovery of aircraft wreckage from accident site within the vicinity of the airport is done using appropriate wreckage recovery procedures.

CONCLUSION

17 Findings were made:

1. The flight crew members were licensed, medically fit and adequately rested.
2. The result of the toxicological examination for substance abuse carried out on the crew was negative.
3. During the post-accident interview, the PM reported that he took over control at the latter part of the landing roll.
4. The aircraft had a valid Certificate of Airworthiness.

5. The weight and Centre of Gravity of the aircraft were within the prescribed limits.
6. There was no evidence of pre-impact mechanical malfunction of any structure, flight control systems or engines.
7. There was no reported adverse weather during approach and landing at Abuja airport.
8. The crew lost directional control during the landing roll.
9. The aircraft veered off and came to rest on the right shoulder of the runway.
10. The aircraft right main landing gear strut detached from its attachment point.
11. The distance from the centre line of runway 22 to the nose wheel skid markings at touchdown was 6m.
12. The nose landing gear tyres were abraded crosswise.
13. The inboard tyre of the detached right main landing gear was deflated.
14. The response of the airport emergency service was prompt.
15. Thrust reversers were not deployed.
16. The aircraft was repositioned to another location the next day without notifying the Bureau.
17. Inadequate applications of Crew Resource Management (CRM) procedure in accordance with Nestoil Plc SOP during the landing roll.

Closing

Thanks you for your patience.