

SPEECH OF THE COMMISSIONER/CEO OF ACCIDENT INVESTIGATION BUREAU (AIB), ENGR. AKIN OLATERU AT THE MEDIA BREFING ON THE RELEASE OF SIX ACCIDENT REPORTS HELD ON 18 APRIL, 2018 AT AIB SAFETY HOUSE, MURTALA MUHAMMED INTERNATIONAL AIRPORT, LAGOS.

## Gentlemen of the press,

I welcome you all to Aviation Safety House, the corporate office of Accident Investigation Bureau (AIB), Ikeja, Lagos.

Today we are making available to the public outcome of our investigations into two accidents and four serious incidents. This to us is a remarkable achievement in our pursuit of aligning AIB to its core mandate.

Final Reports (2007 - Date)	35
Final Reports Jan 2017 - Date	16

Safety	Recommendation	(2007-	147
Date)			
Safety	Recommendation	(2017-	66
Date)			

Today we have release 35 Final Reports and a total of 147 safety recommendations since the inception of AIB. We believe that this has impacted air safety, not only in Nigeria but globally.

With 66 safety recommendations out of 147 and 16 final reports out of 35 recorded from January 2017 to date, we have achieved 45% of our Safety Recommendation and 46% of publication of the accident and serious incident report.



To ensure that our recommendations are effective and are getting the desired results and as you may be aware, we recently inaugurated a committee to review all safety recommendations issued by the Bureau since inception to measure the effectiveness of the safety recommendation. We look to publish the report of the exercise shortly.

Reaching a total of 16 accident and serious incident reports in the last 15 months could only be made possible by the tremendous effort of our members of staff who continuously have sleepless night in ensuring that we clear the backlog, the support of the supervisory Ministry and particularly the Honourable Minister cannot be over emphasised.

Accident investigation and reporting is not an easy task especially when there are several laws/procedures/regulations that govern each investigation. When there is an occurrence, it is important to investigate and publish the findings of the occurrence promptly for avoidance and prevention.

As we work assiduously to clear the backlog of reports, we are equally ensure that new occurrences are investigated promptly.

Please feel free to visit our website www.aib.gov.ng for the 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. Final Report on Accident involving Associated Airlines Limited Embraer 120 ER aircraft with registration 5N-BJY, which occurred at Murtala Muhammed Airport, Lagos on 3rd October, 2013.
- 2. Final Report on the Accident involving Westlink Airlines Limited Piper Aztec23-250 Aircraft with Registration Number 5N-BGZ which occurred at Matseri Village, Bunza Local Government Area of Kebbi State, Nigeria on 11th August 2014.
- 3. Final Report on the Serious Incident involving two Bristow Helicopters (Nig.) Ltd aircraft, Bell 412 helicopters with Registration numbers 5N-BGS, and 5N-BDD, which occurred at the Addax Base Helipad, Calabar, CrossRiver State, Nigeria on 12th November, 2009.
- 4. Final Report on the Serious Incident involving a NAHCO Aviance Baggage Loader Vehicle Fleet No. L3-23 and a parked Bombardier DHC-8-400 aircraft belonging to Aero Contractors with registration 5N-BPT which occurred at Aero Ramp, MMA, Lagos State on the 29th of April, 2014
- 5. Final Report on the Serious Incident involving a Nigerian College of Aviation Technology (NCAT) Aircraft Tampico



Club TB9 with Registration Number 5N-CBE which occurred at Zaria Aerodrome, Kaduna State, Nigeria on 4th October 2012.

6. Final Report on the Serious Incident involving Tampico TB-9 Aircraft belonging to the Nigerian College of Aviation Technology (NCAT) with Registration Number 5N-CBI which occurred at the Zaria Aerodrome in Kaduna State on 23rd May, 2012.

All the reports have been uploaded to our website and can be accessed by members of the public.

I will however go through the summaries of these reports.



#### **Associated 5N-BJY**

Registered Owner and Operator: Associated Aviation Limited

**Aircraft Type and Model:** EMB 120 ER

**Manufacturer:** Embraer S. A. **Year of Manufacture:** 2003

Serial Number: 4078

**Registration Number:** 5N-BJY

Location: Murtala Muhammed Airport, Lagos

N 060 33.5' E 0030 19.5' Elev. 55ft

Date and Time: 3rd October 2013 at about 0930hrs

All times in this report are local times (equivalent to UTC+1) unless otherwise

#### **SYNOPSIS**

On 3rd October 2013, SCD361 an EMB 120ER, registration 5N-BJY, a charter flight, scheduled to depart Lagos to Akure on an Instrument Flight Rules (IFR). The Captain was the Pilot Flying (PF) and the First Officer was the Pilot Monitoring (PM). The aircraft departed with No. 1 Engine torque indicator stuck at 76%. A crew-derived non-standard procedure was used to set the No. 1 Engine take-off power, as the torque indicator is the primary gauge for setting power. After take-off power was set, a take-off flap configuration aural warning came on indicating that the flap position did not agree with the selection. This was followed by auto-feather aural warning.



The No. 2 Propeller RPM was low. The PM was concerned that in addition to the warnings the aircraft was slow and advised the PF to abort the take-off. The aircraft got airborne, climbed to 118ft AGL, stalled and crashed into the Joint Users Hydrant Installation (JUHI), close to the airport, with the landing gears in the DOWN position. There was post impact fire, 16 fatalities and 4 serious injuries. The investigation identified the following causal and contributory

#### **Causal Factor**

factors:

- i. The decision of the crew to continue the take-off despite the abnormal No. 2 Propeller rpm indication.
- ii. Low altitude stall as a result of low thrust at start of roll for takeoff from No. 2 Engine caused by an undetermined malfunction of the propeller control unit.

#### **Contributory Factors**

- i. The aircraft was rotated before attaining V1.
- ii. The decision to continue the take-off with flap configuration warning and auto- feather warning at low speed.
- iii. Poor professional conduct of the flight crew.
- iv. Inadequate application of Crew Resource Management (CRM) principles.
- v. Poor company culture.
- vi. Inadequate regulatory oversight.

Four Safety Recommendations were made.

## SAFETY RECOMMENDATIONS 4.1 Safety Recommendation 2017-020



NCAA should enhance the enforcement of the regulations with regards to the implementation of operators approved personnel training program.

## 4.2 Safety Recommendation 2017-021

NCAA should intensify its safety oversight function on the Airline to ensure that flight operations are carried out in accordance with approved operations manuals in line with the provisions of Nig. CARs.

## 4.3 Safety Recommendation 2017-022

NCAA should intensify its safety oversight on Associated Aviation Ltd to ensure staff welfare issues, and remunerations are settled promptly.

#### 4.4 Safety Recommendation 2017-023

NCAA should ensure that State Confidential Voluntary Reporting System is established and implemented in line with the State Safety Program.

NCAA's response to these recommendations can be found in the report.



#### Bell 412 helicopters 5N-BGS and 5N-BDD

**Registered Owners:** Bristow Helicopters (Nig.) Ltd. **Operators:** Bristow Helicopters (Nig.) Ltd.

**Aircraft Type and Models:** Bell 412 SP

**Manufacturers:** Bell Textron Canada

**Dates of Manufacture:** 1989, 1981

**Registration Number:** 5N-BGS, 5N-BDD **Serial Numbers:** 33186, 33046

**Location:** Addax Base Helipad, Calabar

N 04<sup>0</sup> 18'55", E 008<sup>0</sup> 22'02.5"

**Date and Time:** 12th November 2009 at 1015hrs

All times in this report are local time (equivalent to UTC+1) unless otherwise stated.

#### **SYNOPSIS**

The Accident Investigation Bureau (AIB) was notified by the Nigerian Civil AviationAuthority (NCAA) of the occurrence and investigators were dispatched to the site the same day. On the 12th November, 2009 at 0805hrs a Bell 412 Helicopter, 5N-BGS departed for the first operation of the day from Addax Base helipad, Calabar to Margaret Ekpo International Airport, Calabar to pick up passengers for an offshore operation, and on completion of the flight returned to Addax Base Helipad at 0935hrs.

The PF lifted the helicopter to double the hover height, moved rearwards, descended back to hover height, initiated a left turn to face the opposite direction. During the turn the tail rotor struck the main rotor of a parked helicopter. 5N-BGS went into a spin, the PF closed the throttles to idle, controlled it to the deck and shutdown the engines. There was no fatality and no fire outbreak.



The investigation identified the following causal and contributory factors:

#### **Causal Factor**

The lack of situational awareness by the crew by being preoccupied with avoiding the obstacles in front and did not take cognisance of the parked aircraft 5N-BDD as an obstacle.

#### **Contributory Factor**

- 1. Parking of the aircraft 5N-BDD outside the designated parking area.
- 2. Inadequate pre-flight inspection.
- 3. Poor Airmanship.

#### Four Safety Recommendations were made.

## 4.1 Safety Recommendation 2017-024

NCAA should ensure that Calabar Base Helipad Manual of APDNL be reviewed tocomply with the Nig.CARs.

## 4.2 Safety Recommendation 2017-025

APDNL should ensure that Helicopters are properly parked in designatedlocations.

## 4.3 Safety Recommendation 2017-026

APDNL should ensure that Helicopter Landing Officers (HLOs) are always presentduring aircraft operations.

## 4.4 Safety Recommendation 2017-027

NCAA should ensure that helicopter flight operations at the Helipad are done inaccordance with Nig. CARs.



#### **Aero Contractors 5N-BPT**

**Registered Owners:** Aero Contractors Nigeria Limited

and NAHCO Aviance

**Operators:** Aero Contractors Nigeria Limited

and NAHCO Aviance

**Models:** DHC-8-400 / TUG 660-241

Manufacturers: Bombardier/Stewards & Stewards

**TUG 660** 

**Dates of Manufacture:** 2003/2007

Registration Number: 5N-BPT (Aircraft)/ Vehicle Fleet No. L3-

23 (Baggage Loader)

**Serial Numbers:** 4078 / 8791

**Location:** MMA (AERO RAMP), Lagos.

**Date and Time:** 29th April 2014 @ 0640hrs

All times in this report are local time (equivalent to UTC+1) unless otherwise stated.

#### **SYNOPSIS**

The Accident Investigation Bureau (AIB) was notified by a passenger of the incident on Tuesday 29th April, 2014 at about 0715hrs. Investigators were dispatched to the incident site at Aero Ramp, Murtala Mohammed Airport (MMA) General Aviation Terminal (GAT), Ikeja Lagos. All relevant authorities were notified.



On the 29th April, 2014 at about 0640hrs, an Aero Contractors aircraft with registration number 5N-BPT was positioned for flight. While passengers were boarding, a NAHCO Aviance Baggage Loader vehicle with Fleet No. L3-23 driven by a NAHCO personnel rammed into the pressurized area of the lower fuselage section of the cargo compartment on the port side of the aircraft, damaging it and the baggage loader vehicle.

There was no fatality but the unauthorised driver of the baggage loader vehicle sustained serious injuries that resulted in his loss of consciousness and control of the vehicle. The vehicle later stopped at a distance of about 110ft from the incident aircraft. The driver was moved to a private hospital near the airport for initial treatment. Arrangement was made with the hospital for a detailed medical and toxicological examination.

This incident occurred in daylight.

The investigation identified the following causal and contributory factors:

#### **Causal Factor**

The NAHCO personnel who operated the baggage loader vehicle was neither employed to operate the vehicle, nor was he authorized to do so.

## **Contributory Factor**

- 1. The rostered driver of the baggage loader vehicle was not available at the time of the occurrence.
- 2. The non-adherence to NAHCO Safe Operating Procedures by the Ramp manager.

Four Safety Recommendations were made.



## 4.1 Safety Recommendation 2017-028

NAHCO Aviance should ensure strict adherence to its Standard Operating Procedures.

## 4.2 Safety Recommendation 2017-029

The AOC holder should determine the minimum number of personnel/equipment for airline ground handling operations to be deployed for each aircraft type.

### 4.3 Safety Recommendation 2017-030

NCAA should ensure operators provide checklist/ SOP on each equipment/vehicle assigned to each aircraft type. The SOP should list the minimum number of personnel required for each equipment/vehicle, driver/loaders and any other personnel and the skills required for the handling of the ground equipment.

## 4.4 Safety Recommendation 2017-031

NCAA should ensure ground handling operators make provision in their safety management programme to report any breaches of safety management programme that result to serious incidences to responsible authorities.



## NCAT Aircraft Tampico Club TB9 - 5N-CBE

Aircraft Accident Report No.: NCAT/2012/10/04/F

**Registered Owner:** Nigerian College of Aviation

Technology (NCAT)

**Operator:** NCAT

**Aircraft Type and Model:** Tampico Club TB 9 **Manufacturer:** DAHER SOCATA, France

**Date of Manufacture:** 1998 **Registration:** 5N – CBE **Serial No.:** 1849

**Place of the Accident:** Zaria Aerodrome, Kaduna State **Date and Time of the Accident:** 4th October, 2012 at 1201

Local Time

All times in this report is local time (Equivalent to UTC+1) unless otherwise stated.

#### **SYNOPSIS**

On 4th of October 2012, Accident Investigation Bureau (AIB) was notified by the Nigerian College of Aviation Technology (NCAT) Zaria, of the serious incident involving a Tampico Club TB 9 aircraft, with registration 5N-CBE belonging to NCAT, which occurred at Zaria Aerodrome. A team of investigators were dispatched to assess the aircraft and the incident site on 5th October 2012.

At 1201hrs, the student pilot (SP) took off from runway 24 and carried out four "touch and go" landings as part of a "Consolidated Solo Circuit and Landing" exercise. On the fifth circuit, the SP notified Tower of the intention to make a "full stop" landing. On this



approach the SP came in with excess speed, the aircraft ballooned and a go around was executed.

On the sixth circuit, the SP reported having problems managing power and flare manoeuvre. Thereafter, the Flight Instructor (FI) contacted the aircraft from the Tower and talked down the SP all the way to landing.

The SP reported that during landing, the aircraft was flared before closing the power and it ballooned. The SP lost control of the aircraft, and it veered off to the right of the runway and stopped in a drainage that runs parallel to the Runway.

The SP came out of the aircraft without injury and was taken to the College clinic, examined and certified fit. There was no fire but the aircraft was substantially damaged.

#### **Causal Factor**

The decision to release the SP for the flight with observed uncorrected limitations.

## **Contributory Factors**

i. The SP's inability to maintain appropriate final approach airspeed.

ii. The loss of directional control of the aircraft after power was added on touchdown.

## Four safety recommendations were made.

## 4.1 Safety Recommendation 2017-032

NCAT should incorporate Solo Consolidation training procedures in the Flying School Procedure Manual (FSPM)

## 4.2 Safety Recommendation 2017-033

NCAT should ensure that recorded deficiencies of student pilots are properly addressed before being cleared for solo flight.



## 4.3 Safety Recommendation 2017-034

NCAT should install CCTV cameras at the airside to monitor for the reviewing of flight operations.

## 4.4 Safety Recommendation 2017-035

NCAA should ensure that NCAT fully complies with the training requirements of student pilots with peculiar challenges in accordance with the relevant sections of Nig.CARs 2009.

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#### NCAT - 5N-CBI

Registered Owner and Operator: Nigerian College of Aviation

Technology (NCAT), Zaria

**Aircraft Type and Model:** Tampico Club TB-9

**Manufacturer:** EADS SOCATA FRANCE

Date of Manufacture:1996Registration Number:5N-CBISerial No.:1862

**Location:** Zaria Aerodrome

**Date and Time:** 23rd May, 2012 at

1721hrs Local time.

All times in this report are local times (equivalent to UTC+1) unless otherwise stated

#### **SYNOPSIS**

Accident Investigation Bureau (AIB) was notified of the occurrence by the College on the 23rd of May, 2012. The AIB investigators arrived at the College on the 24th of May 2012 and commenced the investigation the same day. All relevant authorities were notified accordingly.

The aircraft was operated by the Nigerian College of Aviation Technology (NCAT) and registered under special category (Training) with the Nigerian Civil Aviation Authority (NCAA).

On the 23rd May, 2012 the Student Pilot (SP) and the Flying Instructor (FI) were scheduled for the first flight training of the day. The SP took-off at 0720hrs on a dual training exercise under the supervision of the FI. The SP made a full stop landing at 0825hrs after several practices of circuits and landings at the aerodrome thereby ending the first training period.

At 1620hrs, the SP and the FI took-off for the second training session for the day and landed at 1705hrs after five circuits and



landings. After the last landing while the SP was about to shut-down the engine of the aircraft, the FI made a radio call to the Control Tower that the SP was ready to go on the first Solo flight and thereafter the FI disembarked from the aircraft and proceeded to the Control Tower to monitor and observe the flight.

After departure, the SP reported left downwind leg maintaining 3100ft for runway 24. On final approach, the SP reported reducing power when the runway was noticed to be going under the aircraft which meant that the aircraft was coming high.

The aircraft landed at 1721hrs. During the landing roll an attempt was made to exit the runway to the right via exit 3 onto the taxiway to the apron at a high speed.

The aircraft veered-off the centreline of the runway to the right, missed exit 3, continued to roll onto the grass and then finally came to rest with the nose gear in the drainage ditch. The SP contacted the Control Tower and reported the occurrence.

The SP was evacuated from the aircraft unhurt and taken to NCAT clinic, examined and certified fit.

The investigation identified the following causal and contributory factors:

#### Causal factor

The decision to vacate the active runway at an excessive speed.

## **Contributory factor**

The clearing of the SP for first solo flight was premature.

## 4.1 Safety Recommendation 2017-036



NCAT should, in collaboration with FAAN, immediately erect proper signage markings for the four exit points on the runway and ensure that all the markings at the aerodrome are visible.

## 4.2 Safety Recommendation 2017-037

NCAT should ensure HV-Clothing is used on the airside as a standard practice.

#### 4.3 Safety Recommendation 2017-038

NCAT should designate a competent person to supervise fuelling procedures in the College.

#### 4.4 Safety Recommendation 2017-039

NCAT should incorporate the following in their Procedures Manual or Maintenance Organizational Exposition (MOE):

- Dispensing Equipment Procedures.
- Electrostatic Protection Procedures.
- Contamination Protection Procedures.
- Related record keeping procedures.

## 4.5 Safety Recommendation 2017-040

FAAN should ensure that overgrown shrubs at the airside are regularly cut and trimmed to prevent obscuring pilots view in locating markings and signage.

## 4.6 Safety Recommendation 2017-041

FAAN should ensure that The Aerodrome is completely fenced and secured, to prevent stray animals and unauthorised persons from entering the airside.

## 4.7 Safety Recommendation 2017-042



FAAN should ensure that Vehicles moving into the manoeuvring areas are fitted with amber lights and equipped with I-Com radio transceiver as required in the FAAN Airside Vehicle Control Manual and ICAO Annex 14.



#### Westlink Piper Aztec23-250 Aircraft - 5N-BGZ

**Registered Owner:** Africa Contract and Equipment

(ACE) Limited, International Airport,

Kaduna State

**Registered Operator:** Westlink Airlines Limited Flat 1,

Block 4, Gwaram close, off Abakaliki

street, Area 3, Garki, Abuja FCT

**Aircraft Type and Model:** Piper Aztec 23-250

Manufacturer: Piper Aircraft Corporation,

U.S.A.

**Date of Manufacture:** 1969 **Serial No.:** 27-4155

**Registration Number:** 5N-BGZ

**Location:** A Farm Land at Matseri Village,

Kebbi State, Nigeria.

Coordinates 12.1172N, 4.0910E

**Date and Time:** 11thAugust 2014 at 1830hrs

All times in this report are local time, equivalent to UTC + 1 unless otherwise stated

#### **SYNOPSIS**

The Bureau was notified of the occurrence by the operator through a phone call on the 11th August, 2014 at 2140hrs. Investigators were dispatched the following day, arriving the scene at 1800hrs and commenced investigation. All relevant stakeholders were notified accordingly.

On 11th August, 2014, at 1817hrs, 5N-BGZ, a Piper Aztec 23-250 aircraft operated by Westlink Airlines Ltd, on a Special (Training)



Category, departed BirninKebbi airstrip for a low level VFR pest control exercise in Matseri Village, Bunza Local Government Area.

The aircraft climbed to 1000ft Above Ground Level (AGL), no reported adverse weather, clear skies with relative calm wind. On board the aircraft was the Pilot and an Observer. Ten minutes after take-off, 5N-BGZ arrived target field and made some passes overhead the field to check for low level obstacles before commencing spray. A first spray pass over the target field was made. On the second and final pass of the day, the Pilot and the Observer suddenly noticed an electric power distribution line which was almost at the same height/level with their flight path. The Pilot slammed in power on the throttle and the Observer instinctively followed through on control, the aircraft was pitched nose up in an attempt to clear the obstacle, but the tail plane of the aircraft collided with the electric power cables. Consequently, the aircraft impacted the ground some distance away from the power line. The power line was not detected during thepasses to check for low level obstacles.



The two occupants disembarked unhurt but the aircraft was destroyed.

The accident occurred at coordinates 12.1172N, 4.0910E and elevation 865ftin daylight.

The investigation identified the following causal and contributory factors:

#### **CAUSAL FACTOR**

Inadequate visual lookout and failure to avoid the obstacle.

#### **CONTRIBUTORY FACTORS**

- 1. Less than adequate planning and preparation for the flight.
- 2. Less than adequate pilot training and experience on agricultural aerial work.
- 3. Limited regulatory guidance and oversight on agricultural operations.

## Four Safety Recommendations were made.

#### 4.1 SAFETY RECOMMENDATION 2017-043

NCAA should ensure that applicants/certificate holders develop a comprehensive training manual for personnel involved in Aerial Work Operations.

#### 4.2 SAFETY RECOMMENDATION 2017-044

NCAA should enhance its oversight function and establish a means of compliance by the operators of Agricultural Aerial Work.

#### 4.3 SAFETY RECOMMENDATION 2017-045

NCAA should ensure proper verification, documentation and secure record keeping of all documents submitted to it by aviation service providers.



#### 4.4 SAFETY RECOMMENDATION 2017-046

NCAA should review the requirements in Part 11(Aerial Work) of the Nigerian Civil Aviation Regulations. Any amendment to these regulations should also take into consideration, issues of Health and Safety, Environmental Protection, Standards and Safety of Economic Poisons, in cooperation with other regulatory agencies concerned.

Thank you for your patience.