



# AIRCRAFT ACCIDENT REPORT

IAC/2014/03/27/F

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**Accident Investigation Bureau**

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**Report on the Serious Incident involving a Diamond  
DA-40 aircraft with Nationality and Registration Marks  
5N-BRM owned and operated by International  
Aviation College which occurred on Runway 23, Ilorin  
International Airport  
On 27th of March, 2014**



This report is produced by the Accident Investigation Bureau (AIB), Murtala Muhammed Airport, Ikeja, Lagos.

The report is based upon the investigation carried out by Accident Investigation Bureau, in accordance with Annex 13 to the Convention on International Civil Aviation, Nigerian Civil Aviation Act 2006, and Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2016.

In accordance with Annex 13 to the Convention on International Civil Aviation, it is not the purpose of aircraft accident/serious incident investigations to apportion blame or liability.

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Accident Investigation Bureau believes that safety information is of great value if it is passed on for the use of others. Hence, readers are encouraged to copy or reprint for further distribution, acknowledging the Accident Investigation Bureau as the source.

Safety Recommendations in this report are addressed to the Regulatory Authority of the State (NCAA). This authority ensures enforcement.

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## **GLOSSARY OF ABBREVIATIONS USED IN THIS REPORT**

AFM	Aircraft Flight Manual
AIB	Accident Investigation Bureau
AMEL	Aircraft Maintenance Engineer License
AMSL	Above Mean Sea Level
AMO	Approved Maintenance Organisation
APP	Approach
ATC	Air Traffic Control
ATO	Approved Training Organisation
ARFFS	Aerodrome Rescue and Fire Fighting Service
CBT	Computer Based Test
CFI	Certified Flight Instructor
CPL	Commercial Pilot License
CVR	Cockpit Voice Recorder
°C	Temperature in degree Celsius
DATCO	Duty Air Traffic Controller
DNIL	ICAO Location Indicator for Ilorin Airport
FDR	Flight Data Recorder
FI	Flight Instructor
h	hour
HOT	Head of Training
hPa	Hectopascal



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IAC	International Aviation College
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
KIAS	Indicated Airspeed calibrated in Knots
kt	Knots
km	Kilometre
LATCI	Local Air Traffic Control Instructions
m	Metres
NAMA	Nigerian Airspace Management Agency
NCAA	Nigerian Civil Aviation Authority
NIMET	Nigerian Meteorological Agency
NSC	No Significant Cloud
PPL	Private Pilot License
QNH	Altimeter setting above mean sea level
SCT	Scattered
SP	Student Pilot
UTC	Universal Co-ordinated Time
VOR	Very High Frequency Omni-directional Radio Range



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<b>Registered Owner and Operator:</b>	International Aviation College (IAC), Ilorin
<b>Aircraft Type and Model:</b>	Diamond DA-40D
<b>Manufacturer:</b>	Diamond Aircraft Industries GmbH, Austria
<b>Year of Manufacture:</b>	2007
<b>Nationality and Registration Marks:</b>	5N-BRM
<b>Serial Number:</b>	D4.290
<b>Location:</b>	Ilorin International Airport, Ilorin
<b>Date and Time:</b>	27th March, 2014 at 11:18 h

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

## **SYNOPSIS**

The Accident Investigation Bureau (AIB) was notified about the accident on 27th March, 2014 at about 14:00 h via written memo from the Rector of the College to the Director of Operations, Accident Investigation Bureau, Abuja Office. Investigators were dispatched to Ilorin the next day, 28th March, 2014 and arrived at about 13:00 h.

On 27th March 2014, at about 10:26 h, a Diamond DA-40D aircraft, 5N-BRM was on a training flight with a Student Pilot and an Instructor. After two successful landings under supervision of the Instructor, the Student Pilot was released for his first solo





flight. The Instructor disembarked and the Student Pilot proceeded to fly solo. The Student Pilot took off flying the runway 23 circuit and executed a Touch and Go landing, requesting a full stop on the second landing, which ATC granted. On the second landing at touchdown, the aircraft lost directional control and veered off left of Runway 23 centreline into the grassy area.

The Air Traffic Controller sounded the crash alarm and the Aerodrome Rescue and Firefighting Services (ARFFS) arrived the site of the accident thereafter. The Student Pilot disembarked the aircraft without injury.

The investigation identified the following causal and contributory factors:

### **Causal Factor**

Loss of directional control after touchdown and subsequent veer of the aircraft off the runway.

### **Contributory Factor**

Wrong engine power application during landing roll.

**Two Safety Recommendations were made.**



## **1.0 FACTUAL INFORMATION**

### **1.1 History of the Flight**

On 27th March 2014, at about 10:26 h, a Diamond DA-40D aircraft, operated by International Aviation College (IAC), Ilorin with nationality and registration marks 5N-BRM was on a training flight with a Student Pilot and an Instructor. The student did two landings under the supervision of the Instructor and was thereafter released for his first solo flight. The Instructor disembarked to monitor the progress of the solo flight with a hand-held radio from a strategic position on the tarmac while the Student Pilot proceeded with the flight. The Student Pilot took off and executed a successful Touch-and-Go exercise, after which he requested for a full stop landing and ATC granted approval to his request.

At 11:17 h, he reported finals on runway 23 for full stop landing and was cleared to land. According to the ATC report, at 11:18 h the aircraft touched down on runway 23 and bounced twice. The Student Pilot also reported that after the aircraft bounced, he decided to "go around" by increasing power but veered off the runway to the left into the grass area. The left wing impacted a shrub which broke the landing light. The nose landing gear sheared off, causing the aircraft nose to impact the ground, damaging the propeller blades.

The Air Traffic Controller activated the crash alarm, alerting the Aerodrome Rescue and Firefighting Services (ARFFS) who arrived at the site of the accident shortly thereafter. The Student Pilot, who was the lone occupant, disembarked the aircraft unassisted and without injury.



## 1.2 Injuries to Persons

<b>Injuries</b>	<b>Crew</b>	<b>Passengers</b>	<b>Total in the aircraft</b>	<b>Others</b>
<b>Fatal</b>	Nil	Nil	Nil	Nil
<b>Serious</b>	Nil	Nil	Nil	Nil
<b>Minor</b>	Nil	Nil	Nil	N/A
<b>None</b>	1	Nil	1	N/A
<b>TOTAL</b>	1	Nil	1	Nil

## 1.3 Damage to Aircraft

The aircraft was substantially damaged.

## 1.4 Other Damage

Nil.

## 1.5 Personnel Information

### 1.5.1 Student Pilot

Nationality:	Nigerian
Age:	41
License Type:	SPL
Instrument Rating:	None
Proficiency/Recurrent Check:	Not Applicable
Medical Validity:	20th August, 2014



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Total Flying Experience:	41 h
On type:	41 h
Last 90 days:	29:46 h
Last 7 days:	05:52 h
Last 24 hrs:	02:12 h

The Student Pilot accumulated a total of forty-one flying hours on the aircraft type. It is on record that the Student Pilot had gone through the Training exercises required for a first solo flight and logged enough hours (41 hours). His Flying Progress Record shows that he, up to the time of the accident, was an 'average' student; in the record, he was variously described as a "very slow learner"; "need[s] to be more proactive"; "power management poor"; "avoid fixating on instruments"; "very high on final", to mention a few.

On this incident final Check-out Solo Flight, the Student Flight Progress Check Records indicate 'Pre-solo satisfactory', 'carried out C/C, safe landing', 'Released for 2<sup>nd</sup> Solo'

The Student Pilot was a member of a batch of Nigeria Air Force (NAF) officers enrolled at IAC to acquire pilot's licenses in order to enhance their military career. The student's training was randomly interrupted for one reason or the other due to official military duty assignments, with a break of two or more weeks sometimes.

### **1.5.2 Flight Instructor**

Nationality:	Indian
Age:	38
License Type:	CPL
Instructor's Rating:	Airplane Single, Multi-Engine and Instrument only

Aircraft Rating:	Diamond DA-40/42
Instrument Rating Validity:	14th August, 2014
Instructor's Rating Validity:	18th June, 2014
Proficiency/Recurrent Check:	Not Available
Medical Validity:	29th August, 2014
Total Flying Experience:	2,583 h
On type:	1,237 h
Last 90 days:	Not Available
Last 7 days:	17:54 h
Last 24 hours:	2:12 h

## **1.6 Aircraft Information**

### **1.6.1 General Information**

Type:	Diamond DA-40D
Manufacturer:	Diamond Aircraft Industries GmbH, Austria
Year of Manufacture:	2007
Serial Number:	D4.290
Nationality and Registration Marks:	5N-BRM
Registered Owner/Operator:	International Aviation College (IAC), Ilorin
Certificate of Airworthiness Validity:	22nd August, 2014
Certificate of Registration:	20th September 2013
Certificate of Insurance Validity:	11th September 2013
Total Airframe Time:	2,072:21 h
Hours Since New:	2,072:21 h



## 1.6.2 Engine

### 1.6.2.1 Engine

Type:	TAE 125-02-99
Model:	D4.290
Manufacturer:	Thielert, Germany
Year of Manufacture:	2007
Serial Number:	02-02-01804
Time Since New (TSN):	896:29 h

### 1.6.2.2 Propellers

Manufacturer:	MT-Propeller, Entwicklung GmbH
Type:	MTV-6-A/187-129
Number of blades:	3
Serial Number:	03081
Date of Manufacture:	2003
Time Since New:	523:44 h

## 1.7 Meteorological Information

Location:	DNIL
<b>Time:</b>	<b>1000 UTC</b>
Wind:	200/06 kt
Visibility:	15 km
Weather:	Nil



Cloud: SCT 330 m  
Temp/Dew point: 31/22°C  
QNH: 1013 hPa

**Time: 1100 UTC**

Wind: 180/10 kt  
Visibility: 15 km  
Weather: Nil  
Cloud: NSC  
Temp/Dew point: 32/23°C  
QNH: 1012 hPa

## **1.8 Aids to Navigation**

The Very High Frequency Omni-Directional Radio Range (VOR) was serviceable at the time of the accident.

## **1.9 Communication**

There was effective two-way communication with ATC.

## **1.10 Aerodrome Information**

Ilorin International Airport (DNIL) has Aerodrome Reference Point 08°26'24" N, 004°29'38" E and an elevation of 343 m (1,126 ft) above mean sea level (AMSL). The aerodrome has a runway orientation of 05/23. The length and width of the runway are



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3,100 m/ 60 m respectively, with an asphalt/concrete surface and a blast pad of 120 m at both ends.

### **1.11 Flight Recorders**

Flight Data Recorder (FDR) or Cockpit Voice Recorder (CVR) were not installed in the aircraft as they are not required by Regulations.

### **1.12 Wreckage and Impact Information**

The aircraft veered left off the centreline runway 23 into the bush, impacted a shrub which broke the landing light, sheared the nose landing gear and damaged its propeller blades, before coming to a stop at about 325 feet from the edge of the runway. The cockpit structure was intact.





**Figure 1:** Photo of damaged landing light on port wing



**Figure 2:** Photo of sheared-off Nose Landing Gear



**Figure 3:** Photo of the broken nose wheel



**Figure 4:** Photo of a propeller blade fragment



**Figure 5:** Photo of the debris trail



**Figure 6:** Photo of the aircraft's forward fuselage and broken propeller blades



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### **1.13 Medical and Pathological Information**

No medical or pathological test was conducted on the Student Pilot.

### **1.14 Fire**

There was no fire.

### **1.15 Survival Aspects**

The accident occurred within the airport vicinity and the Aerodrome Rescue and Firefighting Services (ARFFS) arrived the crash site on time. The Student Pilot disembarked the aircraft unassisted without injury.

The accident was survivable as the aircraft remained intact with liveable volume of space in the cockpit for the occupant. The seats, seat belt harnesses and attachments were all intact.

### **1.16 Test and Research**

Nil.

### **1.17 Organizational and Management Information**

#### **1.17.1 International Aviation College (IAC), Ilorin**

International Aviation College (IAC), Ilorin is an Approved Training Organization (ATO). The approval was granted to conduct training for different professionals in the aviation



industry including Pilot (fixed and rotary wing), Cabin Crew, Air Traffic Controllers and Engineers.

The College was established in 2009 by the Kwara State Government. The College is run as a collegiate system with many schools within the system. Each school addresses a specific area of specialisation in the aviation sector.

## **Maintenance Organization**

IAC has limited Approved Maintenance Organisation (AMO) capability. The aircraft was maintained by qualified engineers in its hangar facility within the airport premises. The last inspection carried out on the aircraft prior to the accident was on 13th March, 2014, two weeks before the accident and there were no significant defects reported during the period.

### **1.18 Additional Information**

#### **1.18.1 Excerpts from IAC training Manual**

##### ***1.6.5 Duration of dual and solo flight at various stages***

*Prior to sending a student on solo a flight instructor is to ensure that the student has completed successfully in accordance with the approved syllabus all the exercises, preceding the solo exercise.*

*Until a student has logged a minimum total flight time of **20 hours** which shall include a minimum of 4 hours of solo flight, he or she shall not be released for a solo cross country flight in excess of 1 hour. A student who is a holder of a PPL may at the discretion of a flight instructor, be released for a solo cross country flight of up to a maximum of 4 hours per one single flight.*



*No dual flying exercise except cross-country, progress or base check, stage check or when caught up in bad weather, is to exceed 1 1/2 hours per student.*

### **1.6.6 Maximum Flying hours in any day/night**

*Flight Instructors and Student pilots must be in good physical condition and have the proper mental attitude, to be able to do their job well and be receptive to instruction respectively,*

*In order to eliminate fatigue in Flight Instructors and Student pilots, IAC, lays down a rest period, and a flying hours in any day as stated in the table below, for flight instructors and students.*

### **Maximum Flying hours in any Day/Night**

	1 day	7 days	30 days	90 days	365 days
Instructors	6 hrs	28 hrs	80 hrs	200 hrs	900 hrs
Students	4 hrs	20 hrs	50 hrs	100 hrs	300 hrs

### **1.6.7 Maximum number of training flight in any day/night**

*The maximum number of training hour in any 24 consecutive-hour period (i.e. per day) for IAC instructor is limited to a maximum of 8 hours while that of a Student Pilots is limited to 2 hours for other flying exercises, but 4hours for cross country flights.*

### **1.6.8 Minimum rest period between duty periods**

*Rest period, is an UNINTERRUPTED and DEFINED period of time on ground, during*



*which a pilot is free from all duties.*

*IAC takes safety as a serious issue, thus In order to eliminate fatigue in Flight Instructors and Student Pilots, IAC, lay down a rest period.*

*It is mandatory for all IAC flight instructor and students pilots to observe a minimum of 12 hour rest period between duty periods.*

## **1.7 TRAINING RECORDS**

### **1.7.1 Rules for security of records and documents**

#### **Compilation and Maintenance of Records**

*The under listed records will be raised and kept for each student's Master File:  
A master file is to be kept on each student and to be held in a lockable cabinet.*

*Flying Training Records, consisting of:*

- A copy of the students' personal information.*
- Solo certificate duly completed for the first solo Session and for each conversion to type.*
- Flight performance record sheet for each reportable/assessed flight.*
- Training Record hours sheet. All essential exercises carried out are to be logged in the remarks column of the respective flight.*
- Result sheets*



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***Knowledge Instruction Records, consisting of:***

- *A copy of the personal information for the student.*
- *Records of any progress tests sat and the results.*
- *Results of school finals.*
- *Result of Knowledge Instruction exams.*

*(1) Flying training records are to be kept in individual student folders and held by flight instructors. Individual flying training records may be seen by the students at the discretion of the individual instructors but are not to leave the possession of the instructor except as required by the Head of Training or the CFI.*

*(2) Synthetic training records are to be held by the Synthetic Training Instructor and available to instructors for updating and debriefing of individual students.*

*(3) Knowledge Instruction training records written paper or electronic copies for (CBT) are to be held by the CGI and will be made available to knowledge instruction instructors for updating and debriefing of individual students whenever the need arises.*

*Normally, the above records will be kept in lockable cabinet. They are available for instructors' updating at all times. On students' completion of training, these records will be kept in the HOT's office for a period of 5years, thereafter it will be transferred to the college's archive for further storage.*

***1.7.2 Attendance records***

*Flying, synthetic flight and knowledge instruction attendance records are to be kept for every training event. It is the responsibility of each student to sign the daily attendance register. The attendance register is then collated and entered into an electronic format*





*where it is programmed to flag up any individual who falls below the required attendance. In the event of any student failing to achieve the required course attendance they will be brought to the attention of the CFI.*

*Flight / Knowledge instruction instructors are to keep a record of student's punctuality in the master file for inclusion in the monthly assessment.*

*The attendance form shall include at least:*

- The course*
- The name of the training module / learning topic - The time of training (total time on CBT, date and duration of the appropriate learning topic per day) – the signature of the Student Pilot (for CAI)*

*Any raised non-attendance records (appendix viii) are to be held by flight instructors, CFI or CGI. If the attendance records are required by the Head of Training for follow-on action, the records are to be copied, and the original forwarded to the H O T.*

*Regular absence of more than two occasions without satisfactory explanation, from training events is to be reported by the respective instructor to the CFI, or CGI. If necessary, review action by the CFI, will be instigated.*

### **1.7.3 The form of training records to be kept**

#### ***Flying:***

*A flight record folder is to be raised for each student to include a pre-solo certificate, and a Flight Performance Record Sheet for every flight. Flight performance record forms are to be filed in reverse chronological order in the flight record folder.*



### **a) Student Records:**

*Training records will be stored electronically in case of CBT and manually for CAI training. Student Training Records to be kept include the following:*

- *Details of theoretical training including CBT Training and Classroom Training.*
- *Details of flight instruction including simulated flight training- Practical Flight Training Syllabus.*
- *Progress reports for the theoretical and flight test.*

### **Knowledge Instruction**

*Every student has an individual file which records the following:*

- *All relevant details of ALL examination results, when taken, re-sits required,*
- *Progress reports are raised as required on a monthly, bi-monthly and/or post- test and examination results and a final report is raised on completion of training.*
- *Details of the ground school hours attended (kept electronically).*
- *Aircraft class rating theoretical exam results.*
- *A record is maintained in the student's file of personal and formal meetings.*

*Training records will be retained for a period of at least five (5) years, in the office of the HOT after which, it will be transferred to the college archive for further storage.*

### **1.7.5 The nature and frequency of record checks**

*Record Checks should be done at regular intervals, at least before each Progress Check.*

*Records should be checked for correct entry and cross checked with the pilots log book.*



### **1.7.6 Standardisation of entries in training records**

#### **Standardisation of Training Records**

*The student's performance on each exercise within a Session is to be graded as follows:*

'1' AS = Above Standard

'2' S = Standard

'3' MS = Marginal Standard

'4' BS = Below Standard

*The record sheet is to contain a comprehensive and accurate manuscript account of the flight as well as recommendations for remedial actions where appropriate.*

*In the event of a student being assessed as 3 for the same exercise on two consecutive occasions or 4 on any occasion, the student concerned is to be invited to sign the Session report form and the matter is to be brought to the attention of the CFI.*

*Every "Marginal Standard, Below Standard" must be explained.*

*Recommendations should be given on how the trainee can reach the required standard.*

### **1.8.5 Requirements before first solo day/night/navigation**

#### **A. Navigation**

*Before sending a student on a first solo navigation Session, the instructor is to ensure that the student has achieved at least 30 hours total flying including 5 hours dual navigation, and has exhibited the capability of carrying out a 180 degree turn under IMC conditions.*



## **B. First solo day**

*Before a student is sent on first solo day, he must have;*

*(1) Satisfactorily completed, the PPL Theoretical Knowledge examination in Air law, Aircraft General Knowledge, Flight Performance Planning, Human Performance and Limitations, Meteorology, Navigation, Operational Procedures, Principles of Flight and Communication.*

*(2) Satisfactorily completed phase 1 of the PPL programme, comprising of at least 10 Hours of dual time of flight instruction on a single-engine aeroplane in the under listed exercises:*

*(a) Pre-flight operations, mass and balance determination, aeroplane inspection and servicing;*

*(b) Aerodrome and traffic pattern operations, collision avoidance and precautions;*

*(c) Control of the aero plane by external visual references;*

*(d) Normal take-offs and landings;*

*(e) Flight at relatively slow airspeeds, recognition of and recovery from incipient and full stalls, spin avoidance; and*

*(f) Unusual attitudes and simulated engine failure.*

***Thereafter a student, who in the opinion of a Flight Instructor is likely to undertake a first solo after completing the 10 Hour of dual flight instruction, will be sent to another Flight Instruction other than his regular instruction for a progress check to ascertain his flight proficiency.***

*After a satisfactory progress check, the Instructor will give a full briefing of the normal and emergency procedures, what to do (1) in the event of engine failure, (2) if the*



*runway becomes blocked, (3) if he has a radio failure etc. It is ESSENTIAL that, a first solo certificate is completed.*

## **1.9 CHECKS AND TEST**

### **1.9.1 General**

*The IAC Flight Training Program includes several checks and tests during theoretical and practical training. The aim of these checks is*

- (1) to determine through practical during a test, that a Student Pilot has acquired or maintained the required level of knowledge and skill,*
- (2) to improve knowledge and flight training in IAC, by feedback of information from the examining staff concerning items / sections of test, that are most frequently failed,*
- (3) to assist in maintaining and where possible, improving air safety standards, by having the examining staff display good airmanship and flight discipline during tests,*
- (4) to provide Student Pilots the possibility for self assessment but also to give the IAC Flight Training Instructor team a possibility to review the student's knowledge and take appropriate actions if they became deficient.*

*The IAC Flight Training Programs incorporates several kinds of test and assessments in the appropriate training syllabi. A brief overview about the nature of the checks is given here:*



## **1.9.2 Flying**

### **1.9.2.1 Progress Check**

*Progress checks are normally conducted at the end of each phase of flight training and it include procedures, manoeuvres, drills etc. which the student has been trained. However, flying skills, essential for the kind of operation, may also be included.*

*A successful progress check is mandatory to continue with the next phase of flight training.*

*Progress Checks will be conducted by an assigned Senior Flight Instructor, the CFI or the Head of Training.*

*Progress Checks may be repeated under the following conditions. If a student does not pass a Progress Check, will be given the opportunity to repeat this check with a Senior Flight Instructor, the CFI or Head of Training). The earliest time for this check is after 7 days. However, the test must be repeated not later than after four weeks of the failed check.*

*The Head of Training shall decide whether additional training before the second theoretical knowledge examination is necessary.*

## **1.19 Useful or Effective Investigation Techniques**

Not Applicable.



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## 2.0 ANALYSIS

### 2.1 General

The aircraft had a valid certificate of airworthiness and there were no reported defects, therefore airworthiness was not a factor in the accident.

The meteorological report showed that the wind was not gusty, the visibility and ceiling were above minima and there was no rain. Therefore, weather was not a factor in this accident.

### 2.2 The Approach and Landing

The aircraft came on a high profile to the runway which is an indication that the approach was not properly executed. According to the Student Pilot, on touchdown, the aircraft bounced twice. The Bureau is of the view that the bouncing could have resulted from the pilot not anticipating his flare during touchdown, causing the aircraft to impact the runway or he plainly stalled the aircraft on landing.

The corrective action would have been for the pilot to apply forward pressure on the control column with power off to keep the aircraft on ground. However, the Student Pilot opted for a Go-Around and applied full power while the aircraft had already begun veering to the left off the runway centre line. Consequently, the aircraft accelerated into the grass area left of the runway.

### 2.3 Student Pilot

The Student Pilot had a total flying time of about forty-one (41) hours on type, 21 hours in excess of the required minimum hours for solo flight by IAC training policy. He



was engaged in other duties with his sponsors causing interruptions in his training schedules. Although it is on record that the Student Pilot had gone through the exercises required for a first solo, his progress reports indicated poor to average performance. These factors might have contributed to his performance on his first solo flight.





## 3.0 CONCLUSIONS

### 3.1 Findings

The investigation revealed the following:

1. The Student Pilot had accumulated 41 flying hours on type before this occurrence.
2. There were interruptions in the Student Pilot's flight training due to official assignments outside the training schedule.
3. The Student Pilot's progress report indicated below average performance (usually high on profile during landing).
4. The Training Instructor monitored the solo flight with a hand-held radio from a strategic place on the tarmac.
5. The Student Pilot had made one successful Touch and Go before the crash.
6. The aircraft bounced twice on landing and the Student Pilot advanced engine throttle for a go-around.
7. The aircraft veered off to the left of runway 23 with high speed into the grass area from the runway edge.
8. The aircraft left landing light was broken.
9. The propeller blades were damaged.
10. The nose landing gear sheared off.
11. The ATC activated the crash alarm after the crash.
12. The ARFFS responded promptly to the crash alarm.



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13. The Student Pilot disembarked the aircraft without any injury.

### **3.2 Causal Factor**

Loss of directional control after touchdown and subsequent veer of the aircraft off the runway.

### **3.3 Contributory Factors**

Wrong engine power application during landing roll.



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## 4.0 SAFETY RECOMMENDATIONS

The following Safety recommendations were made:

### 4.1 Safety Recommendations 2019-029

IAC should have in place a stringent flight training policy to discourage disruptions of students' training during the stipulated period.

### 4.2 Safety Recommendations 2019-030

IAC should develop and incorporate in their training manual, procedures to ensure that corrective actions are developed and implemented to prevent observed deficiencies such as "**exceeding required minimum hours for solo flight**", and duly signed out by Instructors and records kept in the student's file prior to conducting a solo flight.

