



AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION DEPARTMENT
INTERIM STATEMENT- ACCIDENT

AAIID Ref No: ESW-AIG-ACCID-23-001

**Description of Occurrence:**

Occurrence Reference	: ESW-AIG-ACCID-23-001
Occurrence Category	: Accident
Name of the Operator	: Aviation @Work (Pty) Ltd
Manufacturer	: Piper Aircraft, Inc
Aircraft Model	: PA-32-260
Engine(s)	: Lycoming
Nationality	: South Africa
Registration	: ZS-EIX
Type of Flight	: Aerial survey
State of Occurrence	: Eswatini
Place of Occurrence	: Near Lundzi, Mhlambanyatsi, Hhohho Region
Date and Time	: 23 November 2023, 0800Z
Total Crewmembers	: 1
Total Passengers	: 1
Injuries to Passengers and Crew	: 0
Other Injuries	: None
Nature of Damage	: Destroyed

(All times given in this report are Co-ordinated Universal Time (UTC) and will be denoted by (Z). Eswatini Standard Time is UTC plus 2 hours.)

On Thursday morning 23 November 2023 at about 0800Z, a PA-32 departed from Piet Retief Airport with two on board for a 3-hour LiDAR survey flight over a forest plantation in Lundzi, Mhlambanyatsi, Hhohho Region, Eswatini. The flight was conducted under Visual Flight Rules VFR and VMC conditions prevailed on the day.

Prior to departure from Mondi, Piet Retief, South Africa the pilot reported that the aircraft was refuelled, and the tanks were topped up with 71 litres of AVGAS. Pre-flight inspection conducted by the PIC revealed no visible faults or leaks. The intention was to return and land at the same airfield.

The Flight took off at 0600Z and at time 0608Z, contacted Sikhuphe Approach Control Freq 128.0 MHz for clearance to conduct a survey flight between VMS 289 and 308 degrees, 8 to 24 Nm at FL85, Estimated Elapsed Time of 3 hours. The clearance was given with the instruction to report back on details complete. The survey commenced at time 0625Z.

Approximately 01H30 into the flight, the pilot reports hearing a loud “bang” and observed a piece of the left side engine cowling tear away. The cockpit then filled up with a dark smoke and the aircraft shook violently. There was a sharp drop in oil pressure and slow increase in temperature. The windshield was completely covered in oil.

At time 0754Z, the pilot made a MAY-DAY call on frequency 128.00 to Sikhuphe Approach control where they received clearance to attempt a forced landing at FDMS, 17NM east of the flight. Due to altitude loss, the pilot decided to look for a suitable alternative place in the vicinity to land the aircraft.

The pilot then reported seeing a small road within the plantation and committed for the landing as they had little altitude remaining to look for something else. Then aircraft touched down successfully on the road and the pilot started applying heavy brakes because there was limited road remaining. The aircraft still had a fair amount of speed when they reached a bend in the road to the left and the aircraft veered off the road to the right.

The aircraft came in contact with tree stumps, losing the left main landing gear and impacted the ground nose first then fell flat facing west. Smoke and small flames ensued from the engine. The pilot switched all systems off and they evacuated the aircraft through the starboard side door.

The flames spread and engulfed the entire fuselage, and the aircraft was destroyed.

Purpose of the Investigation:

*This report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and **not to apportion blame or liability.***

This Interim Statement gives a brief on the Investigation progress and should be read in conjunction with the Preliminary Report with reference number ESW-AIG-ACCID-23-001 that was published on 23 December 2023.

Later Interim Statements/Reports, or the Final Report, may contain altered information in case of new evidence becoming available during the ongoing investigation.

Investigations process:

The occurrence was categorised as an Accident and the Aircraft Accident and Incident Investigations Division (AAIID) assigned an Accident Investigation File Number ESW-AIG-ACCID-23-001 for this investigation.

The state appointed the investigator-in-charge (IIC) to conduct the investigation in accordance with Annex 13 and the Eswatini Civil Aviation Authority (Aircraft Accident and Incident Investigation) Regulations 2013. The AAIID is leading the Investigation and will issue a Final Report.

The AAIID Reports are made publicly available at: www.eswacaa.co.sz

Interim Statement

This Interim statement gives a brief account of the progress of the Investigation into the subject Accident. This Interim Statement is released in accordance with Standard 6.6 of the International Civil Aviation Organisation *Annex 13*.

Since the release of the preliminary report on 23 December 2023, the investigating team is still in the process of determining and analysing the human performance factors and characteristics of the flight that could have contributed to this accident. In addition, the investigators have reviewed the maintenance records and serviceability of the aircraft, and the findings will be discussed in the final report.

The following findings have been established thus far:

- The pilot was qualified for the flight and had a CPL with instrument rating which was initially issued by the South African Regulator on 12 July 2006. His licence renewal was issued by the Regulator on 25 June 2023 with an expiry date of 30 June 2024.
- The pilot had a valid medical certificate issued on 30.08.2023 with an expiry date of 31.08.2023.
- The pilot accumulated a total of 3576.6 total flying hours of which 23.7 were on the aircraft type.
- Blood toxicology reports showed no presence of intoxicating substances.
- The aircraft was fitted with Light Detection and Ranging LiDAR survey equipment.
- Aircraft engine overhaul was completed on 22/06/2023.

No Safety Recommendation have been issued at this stage.

The investigation is ongoing. Any person who has information concerning this accident should contact the AAIID on aaiid@eswacaa.co.za or +26823335555 / +26878705686.

This Report is issued by:

Aircraft Accident and Incident Investigation Department – under the Authority of,
The Ministry of Public Works and Transport
Kingdom of Eswatini