UNITED REPUBLIC OF TANZANIA

MINISTRY OF TRANSPORT



AIRCRAFT ACCIDENT
INVESTIGATION UNIT
TANZANIA

PRELIMINARY REPORT

Accident No. CAV/ACC/1/26

Aircraft registration and type:	5H-TPK, Cessna 182T
Date of event:	21 August 2026
Place:	Mahale airstrip, Mahale Mountains National Park, Kigoma **Latitude:** S 06º 00.674′ **Longitude:** E 029º 45.883′ **Elevation:** 2,500 feet
Type of flight:	Aerial survey/patrol
Numbers on board:	**Crew:** 4 **Passengers:** Nil
Damage to aircraft:	Substantial. Probably write-off
Commander's age and License*:*	45 years, CPL
Commander's total flying experience:	1,402 hours of which 795 were on type

FOREWORD

This preliminary report was produced by the Ministry of Transport, Aircraft Accident Investigation Unit (AAIU), Tanzania.

The report is based on the investigation carried out by the Aircraft Accident and Incident Investigation Unit (AAIU), in accordance with Annex 13 to the Convention on International Civil Aviation Organization (ICAO), Tanzanian Civil Aviation Act and Civil Aviation (Aircraft Accident and Incident Investigation) Regulations, 2017.

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.

The purpose of this report is to provide details of initial facts, discussions and findings surrounding the occurrence; it includes information gathered from witness statements and a preliminary inspection of the incident site and aircraft.

Readers are advised that the AAIU Tanzania investigates for the sole purpose of enhancing aviation safety. Consequently, AAIU reports are confined to matters of safety significance and should not be used for any other purpose.

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SYNOPSIS

The accident was notified by the operator shortly after it occurred.

The aircraft was approaching runway 31 of Mahale airstrip. The pilot said that when the aircraft was flared for touchdown, it did not do so. Instead, it floated past the intended touchdown point and was airborne for the next 220 meters. After touchdown he realized that the aircraft could not be stopped within the remaining length of the runway. Overshoot also seemed to be a risky option. He therefore chose to steer the aircraft into grass on soft soil beyond the left edge of the runway where he could stop without running into Lake Tanganyika. In the process, 5H-TPK collided with a perimeter fence and the nose landing gear collapsed after sinking into the soft soil. The aircraft was substantially damaged and was probably a write-off. There was no fire and all the four occupants escaped without injuries.

1 FACTUAL INFORMATION

1.1 History of the flight

On 21 August 2026 the aircraft was performing an aerial survey mission over the Mahale Mountains National Park. It was carrying one pilot and another three crew members. After refueling at Kigoma the aircraft took off for Mahale at 0725 hours. The flight landed at Mahale airstrip at 0825 hours. At 0850 hours flight left Mahale for the first leg of the aerial survey. 5H-TPK landed on runway 31 of Mahale airstrip where it was to remain until 1440 hours when it took off for the second and last leg which ended with the incident landing at 1530 hours.

After the last flight the aircraft approached Mahale airstrip to land on runway 31, approaching from the mountain side towards Lake Tanganyika. The pilot said that when the aircraft was flared for touchdown, it did not do so. Instead, it floated past the intended touchdown point and was airborne for the next 220 meters. After touchdown he realized that the aircraft could not be stopped within the remaining length of the runway. Overshoot also seemed to be a risky option. He therefore chose to steer the aircraft into grass on soft soil beyond the left edge of the runway where he could stop without running into Lake Tanganyika. In the process, 5H-TPK collided with a perimeter fence and the nose landing gear collapsed after sinking into soft soil. The aircraft was substantially damaged and was probably a write-off. There was no fire and all the four occupants escaped without injuries.

Two of the occupants said that in the process of landing things occurred so rapidly that they found themselves in a stationary aircraft near the edge of the runway. The remaining occupant said that the flight appeared normal but during the landing roll the aircraft did not appear to settle properly on the runway.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	0	0	0
Serious	0	0	0
None	4	0	0

1.3 The wreckage

The damage to the aircraft was substantial. It is considered that 5H-TPK was damaged beyond economic repair.

1.4 Personnel information

The pilot in command, age 45, held a Commercial Pilot's License with type rating for Cessna 182. He had a valid medical certificate class I valid until 2 November 2026. At the time of the accident, he had accumulated 1,402 hours of total flying time, of which 795 hours were on the type. In the 90 days and 28 days before the accident, he accumulated a total of 106 hours and 59 hours of flying time, respectively.

1.5 Aircraft information

The aircraft, a Cessna 182T serial number 182-81915 powered by one Textron Lycoming IO 540 AB1A5 engine was manufactured by the Cessna Aircraft Company at Wichita, Kansas USA in 2006. It was registered in Tanzania on 15 October 2007 in the name of Tanzania National Parks, P.O. Box 3134 Arusha. A Certificate of Registration number 635 was issued.

A Certificate of Airworthiness number 684 was also issued on 13 November 2007 to expire on 12 November 2008. The Certificate of Airworthiness has since been kept current through periodic renewals. By the time of the accident, it was valid until 4 November 2026.

1.6.1 Weight and Balance

A review of weight and balance and loading information for the accident flight revealed the aircraft was within weight and centre-of-gravity limits.

1.6 Meteorological information

There is no weather station at Mahale airstrip. However, the pilot reported that it was bright sunny day, temperature about 28°Celsius. The windsock showed that the wind was more than 10 kt, gusting and variable.

1.7 Aids to navigation

Not applicable.

1.8 Mahale airstrip

Mahale airstrip, elevation 2,500 feet (762 meters) has one runway (13/31) which is 1,100 meters long and 30 meters wide. At the time of the accident only 800 meters of the runway was usable. The first 300 meters of runway 31 were damaged by floods.

The runway surface is compacted murram. There are mountains in the approach path of runway 31. Lake Tanganyika is located just beyond the end of runway 31. There is a perimeter fence mounted on concrete pillars. At the point where the accident occurred the fence was located 20 meters beyond the left edge of runway 31.

1.9 Flight recorders

Not required by the regulations. None fitted.

1.10 Wreckage and impact information

It was not possible to assess the exact point of touchdown on runway 31. The pilot believed the tire impact marks located on the centerline some 220 meters from the threshold belonged to 5H-TPK. However, there were no clear signs of rolling tires for the next 400 meters. The tire marks became distinctly visible as the aircraft approached the left edge of the runway. By the time it came to a stop it had run around 560 meters from the probable point of touchdown.

As the aircraft left the shoulder of the runway, the left wing collided with a concrete pillar supporting the perimeter fence at mid-span, damaging the main spar and the lift strut. The right wing was also damaged to a lesser extent. However, there was no fuel spillage from any of the wing tanks.

The left-wing impact caused the aircraft to swing to the left and the nose landing gear, which had already dug into soft soil, collapsed causing the propeller to strike the ground. The engine may have also been shock-loaded because of the propeller strike.

1.11 Flight recorders

Not required by the regulations. None fitted.

1.12 Fire

There was no fire

1.13 Survival aspects

This was a survivable accident.

1.14 Tests and research

Not applicable

1.15 Addition information

Not applicable

2. CONCLUSIONS

2.1 Discussion

The investigations did not establish any technical problem with the aircraft which could have contributed to this accident. It was not possible to assess the speed of the aircraft at the time of the attempted touchdown due to the absence of a flight recorder. However, the aircraft descended over mountains and encountered turbulence during the final approach. This may have created unfavourable conditions for landing on the short runway (the runway is only 800 meters long).

The pilot himself testified that he did not touchdown at the intended point on the runway because the aircraft floated and touchdown occurred on the centre line about 220 meters further away. However, there were no visible tyre marks of a rolling aircraft starting from the reported point of touchdown. The distinct tyre marks attributable to 5H-TPK were found near the left edge of runway 31, about 400 meters beyond the point of the alleged touch-down. It is therefore possible that the aircraft may have floated for longer than 220 meters.

After crossing the left edge of the runway, the aircraft continued to roll on grass for about 100 meters until the left wing collided with a perimeter fence, swung to the left and stopped.

The aircraft came to rest in soft soil overgrown by tall grass. It is considered that in the absence of the perimeter fence, the nose landing gear would have dug into the soft soil causing the aircraft to tip on its back.

3. INITIAL FINDINGS

Based on the initial information gathered during the investigation the following facts have been determined:

i. The pilot was properly licensed and qualified to undertake the flight.
ii. The aircraft documents were in order.
iii. The aircraft missed the intended point of touchdown because it floated.
iv. The aircraft struck a fence located 20 meters beyond the left edge of runway 31 before it came to rest on soft ground.

4. SAFETY RECOMMENDATIONS

It is recommended that:

1. Tanzania National Parks (TANAPA) should consider the possibility of increasing the length of the runway at Mahale National Park to make landing and take-off less difficult.
2. TANAPA should consider the possibility of supporting the perimeter fence with plastic pillars instead of concrete ones which are known to damage straying aircraft.
3. TANAPA should consider the possibility of relocating the perimeter fence to at least 50 meters beyond the edges of the runway in order to address stop way issues.
4. TANAPA should consider the possibility of putting speed arresters just beyond the end of runway 31. Experience has shown that sand at the end of a runway can successfully stop an overrunning aircraft without damaging it.