

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10179						
Classification	Accident	Date	26 June 2022		Time	1428Z	
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Mokopane Aerodrome (FAQR) Limpopo Province		Place of Intended Landing		Mokopane Aerodrome (FAQR), Limpopo Province		
Place of Occurrence	Moorddrift Dairy Farm, Limpopo Province						
GPS Co-ordinates	Latitude	24°16'02" S	Longitude	028°57'50" E	Elevation	3608 ft	
Aircraft Information							
Registration	ZU-EZK						
Make; Model; S/N	Ekolot Topaz, KR-030 (Serial Number: 30-01-08)						
Damage to Aircraft	Destroyed			Total Aircraft Hours	616.6		
Pilot-in-command							
Licence Type	National Pilot Licence (NPL) A		Gender	Male		Age	37
Licence Valid	Yes	Total Hours	377		Total Hours on Type	105.3	
Total Hours 30 Days	2.7		Total Flying on Type Past 90 Days	7			
People On-board	1 + 1	Injuries	2	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Sunday, 26 June 2022 at 1422Z, a pilot and a passenger on-board an Ekolot Topaz KR-030 aircraft, registered ZU-EZK, took off on a private scenic flight from Mokopane Aerodrome (FAQR) in Limpopo province with the intention to land back at the same aerodrome. The flight was conducted under visual flight rules (VFR) by day and under the provisions of Part 94 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>The pilot reported that he conducted a pre-flight check and took off from Runway 18 (RWY18), routing towards Moorddrift Dairy Farm whilst climbing to 500 feet (ft) above ground level (AGL). He also maintained radio contact with another aircraft which was inbound to FAQR. About four minutes into the flight, the passenger felt sick and the pilot decided to fly back to FAQR. He planned to route overhead Moorddrift Dairy Farm and make a 180 degrees level turn with one (1) notch flaps selected.</p> <p>Meanwhile, the passenger who meant to adjust the cabin air inlet, accidentally closed the throttle, causing the nose and left wing to drop suddenly. As a resolve, the pilot applied full power and pulled back on the control stick and right rudder to level the wings and raise the nose, however, the aircraft had already entered a spiral dive at low level. The pilot was unable to recover the aircraft due to low altitude. He stated that the only thing he could do was to pull back on the control stick to level the aircraft so as to avoid crashing on the ground nose first.</p> <p>The aircraft collided with power lines and crashed on the ground with its right wing first before coming to rest on its belly. The pilot and the passenger were injured during the accident sequence and were rushed to the hospital. The aircraft was destroyed on impact.</p>							



Figure 1: An aerial view of the accident scene. (Source: Google Earth)



Figure 2: Damage to the aircraft and the power lines. (Source: AIID)



Figure 3: Position of the passenger throttle lever (red arrow). (Source: Pilot)



Figure 4: ZU-EZK Flight Log. (Source: Pilot)

Findings
<p><u>The Pilot</u></p> <ul style="list-style-type: none"> The pilot was initially issued a National Pilot Licence (NPL) on 16 February 2019. The licence was reissued on 26 February 2021 with an expiry date of 25 February 2023. The pilot had a Class 2 medical certificate that was issued on 3 August 2020 with an expiry date of 3 August 2025 and with a restriction to wear corrective lenses. <p><u>Aircraft information</u></p> <ul style="list-style-type: none"> The aircraft had an Authority to Fly (ATF) permit that was initially issued on 1 December 2021 with an expiry date of 31 December 2022. The aircraft's Certificate of Registration (C of R) was issued on 4 November 2021. The last mandatory periodic inspection (MPI) on the aircraft was carried out on 29 July 2021 and the Certificate of Release to Service (CRS) was issued on 29 July 2021 at 605.6 hours, with an expiry date of 10 January 2023 or at 705.6 airframe hours, whichever comes first. The aircraft was maintained by an approved person (AP) with an authorised AP certificate that was issued by the Regulator (SACAA) on 1 August 2021 with an expiry date of 31 July 2022. The aircraft collided with the power lines and crashed on the ground with its right wing first. The on-board Garmin GPS flight log recorded the flight duration as 6 minutes after take-off from FAQR at 1422Z. The pilot and the passenger were injured during the accident sequence and were taken to the hospital. The aircraft was destroyed during the accident sequence.
Probable Cause
Loss of engine power in-flight which led to loss of control of the aircraft and the subsequent collision with the power lines.
Contributing Factors
The passenger accidentally knocked close the power throttle in-flight. Insufficient height for recovery.
Safety Action(s)
None.
Safety Message
There should be a clear warning or guard on the passenger side throttle control lever to warn the passenger not to touch/disturb.

<p>About this Report</p> <p><i>The decision to conduct a limited investigation is based on factors including whether the cause is known and the evidence supporting the cause is clear, the level of safety benefit likely to be obtained from an investigation and that will determine the scope of an investigation. For this occurrence, a limited investigation has been conducted, and the Accident and Incident Investigations Division (AIID) has relied on the information submitted by the affected person/s and organisation/s to compile this limited report. The report has been compiled using information supplied in the initial notification, as well as from follow-up desk top enquiries to bring awareness of potential safety issues to the industry in respect of this occurrence, as well as possible safety action/s that the industry might want to consider in preventing a recurrence of a similar occurrence.</i></p> <p><i>All times given in this report are Co-ordinated Universal Time (UTC) and will be denoted by (Z). South African Standard Time is UTC plus 2 hours.</i></p>
<p>Purpose</p> <p><i>In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011 and ICAO Annex 13, 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.</i></p>
<p>Disclaimer</p> <p><i>This report is produced without prejudice to the rights of the AIID, which are reserved.</i></p>

This report is issued by:

**Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa**