



REPUBLIC OF KENYA

MINISTRY OF TRANSPORT, INFRASTRUCTURE, HOUSING, URBAN

DEVELOPMENT AND PUBLIC WORKS

STATE DEPARTMENT FOR TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION

PRELIMINARY ACCIDENT REPORT
ON A CESSNA 172 REGISTRATION 5Y-CII WITH 3PERONS ONBOARD AT EWAAT
MAUCHE NAKURU KENYA
ON 13TH AUGUST 2022

PARTICULARS OF THE BALLOON

OPERATOR/OWNER	:	Private
AIRCRAFT TYPE/ MANUFACTURER	:	Cessna 172/Textron Inc.
YEAR OF MANUFACTURE	:	1959
REGISTRATION	:	5Y-CII
SERIAL NUMBER	:	46992
DATE OF REGISTRATION	:	20 February 2018
NUMBER AND TYPE OF ENGINE	:	O-300 ser
ENGINE SERIAL NUMBER	:	TBN
DATE OF OCCURRENCE	:	13 August 2022
TIME OF OCCURRENCE	:	0755 am (1055UTC)
LOCATION OF OCCURRENCE	:	Mara North
TYPE OF FLIGHT	:	Private
PHASE OF FLIGHT	:	En-route
PERSONS ONBOARD	:	3
INJURIES	:	Nil
NATURE OF DAMAGE	:	Slight
CATEGORY OF OCCURRENCE	:	Accident
PILOT IN COMMAND (PIC)	:	CPL
PIC'S FLYING EXPERIENCE	:	1700

OBJECTIVE

This report contains factual information which has been determined up to the time of publication. The information in this report is published to inform the aviation industry and the public of the general circumstances of the accident. This investigation has been carried out in accordance with

The Kenya Civil Aviation (Aircraft Accident) Regulations, 2018 and Annex 13 to the ICAO Convention on International Civil Aviation. The sole objective of the investigation of an accident or incident under these Regulations shall be the prevention of accidents and incidents. It shall not be the purpose of such an investigation to apportion blame or liability.

INVESTIGATION PROCESS

The occurrence involving a balloon registration 5Y-CII was notified to the Aircraft Accident Investigation Department (AAID), State Department for Transport (SDT) of the Ministry of Transport, Infrastructure, Housing, Urban development, and Public Works through a phone call by the operator.

Under the provisions of Annex 13 to the Convention on International Civil Aviation, Kenya Civil Aviation Act, and Regulations, an investigation into the circumstances leading to the Accident was initiated immediately.

After the initial on-site investigation phase, the occurrence was classified as an ‘Accident’ owing to the injuries of the persons onboard.

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ABBREVIATIONS

CPL	-	Commercial Pilot License
ICAO	-	International Civil Aviation Organization
KCAA	-	Kenya Civil Aviation Authority

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SYNOPSIS

On 13th August 2022, the Air Accident Investigation unit at the Ministry of Transport, Infrastructure and Urban Development was notified of an accident involving a Cessna 172 type of aircraft, registration 5Y-CII privately operated at approximately 1055 UTC at Ewaat Mauche Nakuru County with 3 onboard. The aircraft which was being operated as a private aircraft from Naishi Airstrip to Mara North. The pilot and the two passengers survived the accident and came out unhurt. The aircraft was slightly damaged after impact.

Preliminary information provided by the pilot-in-command indicated that he departed from Naishi airstrip at 1043 hours UTC and was climbing through to Flight Level 075 for Flight Level 095 enroute. At 1046 hours UTC he noticed the weather along the route was not good for a Visual Flight Rule and he elected to immediately turn and fly about 20° left of track. He estimated a cloud ceiling of 1000 feet overcast and a visibility of less than 5 Km. Two minutes later the aircraft passed overhead a small unknown town. For a few minutes the aircraft operated normally. Just after he passed that town he noticed the aircraft couldn't climb and instead was descending with with the take-off power setting and climb attitude on! At first he thought it wasn't anything serious. When he observed out he noticed that the slope of the ground was rising ahead. Seeing this ground he decided to turn the aircraft to the reciprocal track back to the departure airstrip but the aircraft responded by increasing the rate of descent more than it could clear the rising ground. He elected to stop the turn followed a nearby valley that looked like a stream or a river before he impacted the ground.

1. FACTUAL INFORMATION

1.1 History of the flight

On 13th August 2022, the Air Accident Investigation unit at the Ministry of Transport, Infrastructure and Urban Development was notified of an accident involving a Cessna 172 type of aircraft, registration 5Y-CII privately operated at approximately 1055 UTC at Ewaat Mauche Nakuru County with 3 onboard. The aircraft which was being operated as a private aircraft from Naishi Airstrip to Mara North. The pilot and the two passengers survived the accident and came out unhurt. The aircraft was slightly damaged after impact.

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Further, the pilot narrated that the aircraft continued to descend after which he heard a stall warning which he responded to by attempting to recover. Ahead of the valley was a maize farm which became his target field to place the aircraft if the situation got out of control. The farm was better than the rest of the terrain. Throughout that time the ground continued to be visible and just from nowhere in a turn to follow the Valley, he entered into some clouds and lost Visual contact with the ground for more than 30 seconds. The moment he was clear of clouds a tree appeared ahead of him; they were surely to hit it! To his left and right was the escarpment and he couldn't risk losing anymore height by turning the aircraft, his only option was to select 10° of Flaps. With this flap selected, the aircraft responded beautifully-pitching up with a small gain in height and he heard

the tip of the tree scratched the bottom of the aircraft. It is at that time that he knew the aircraft cannot make it to the target maize farm! The engine was still running at full power but it sounded like it was at Idle power setting. This time the target field was approximately less than 150 metres away but I was really close to ground to a height normally considered " a round out"(less than 20 metres from the ground). Things were moving so fast that he didn't have time for a radio call and passengers brief!



Figure 1: photograph of the accident aircraft at the accident site

1.2 Injuries to Persons

Table 1: Injury chart

Injuries	Crew	Passenger	Others	Total
Fatal	0	0	0	0
Serious	0	0	0	0
Minor/none	1	2	0	3

Total	1	2	0	3
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1.3 Damage to aircraft

There was slight damage

1.4 Other Damages

Nil

1.5 Pilot Information

The pilot-in-command was a South Sudanese citizen 27 years old with a commercial pilot license, issued on 15th March 2022, expiring on 24th February 2023. He held a medical class one certificate with no limitation. By the time of the accident he had a total of 1752 hours total and a total of 700 hours on the type.

1.6 Aircraft Information



Figure 2: Photograph showing C172, Registration 5Y-CII at Wilson airport

The C172 registration 5Y-CII was registered on 20th February 2018. It had been issued with a certificate of airworthiness on 23rd February, 2022 valid until 22nd February 2023 with no limitations. Further information obtained indicated that scheduled maintenance was carried out on 18th July 2022 at 150 hours of inspection. By the time of the accident the aircraft had 2640 airframe hours and 2633 engine hours.

1.7. Meteorological Information.

To be notified.

1.8 Aids to Navigation

N/A

1.9 Communication

N/A

1.10 Aerodrome

N/A

1.11 Flight Recorders

N/A

1.12. Wreckage and Impact Information



Figure 3: Photograph showing the damage of the accident aircraft at the accident site.

The aircraft impacted a thicket of sisal plantaion that acted as a shock absorber and dampened impacted forces. The lef wing bent at the fuselage joint. The head-light also broke off. The left strut also got a significant bent bjut did not break.

The right wing got dented at the tip and the mid-way. The empanage was general intact without any noticeable breakage or dent. There was no any noticeable bent or dent on the propellers.

1.13 Medical and Pathological Information

Not applicable

1.14 Fire

There was no fire after impact

1.15. Survival Aspects

The accident was survivable due to the nature of impact.

1.16. Tests and Research.

Not applicable

1.17. Organization and Management Information

This was a private aircraft that was privately operaed

1.18 Additional Information.

Not applicable

1.19 Useful or Effective Investigation Techniques

Not applicable

2. CONCLUSIONS

Investigation is ongoing

M.A.Ombasa

26.08.2022

