



MINISTRY OF TRANSPORT AND INFRASTRUCTURE

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AIR ACCIDENT INVESTIGATION

FINAL ACCIDENT REPORT

5Y-KNJ

29th December, 2014

MINISTRY OF TRANSPORT AND INFRASTRUCTURE
STATE DEPARTMENT OF TRANSPORT
AIR ACCIDENT INVESTIGATION

INCIDENT REPORT

OPERATOR/OWNER	:	Farmland Development Limited
AIRCRAFT TYPE/ MANUFACTURER	:	Cessna 180/Cessna Aircraft Company
YEAR OF MANUFACTURE	:	1955
AIRCRAFT REGISTRATION	:	5Y-KNJ
AIRCRAFT SERIAL NUMBER	:	31907
DATE OF REGISTRATION	:	01 November 1987
NUMBER AND TYPE OF ENGINE	:	One O-470-R
DATE OF OCCURRENCE	:	29 December 2014
TIME OF OCCURRENCE	:	1030 hours
LOCATION OF OCCURRENCE	:	Karai (01°15'196''S, 036°37'260''E)
DEPARTURE AERODROME	:	Mbaruk (Elementaita)
DESTINATION AERODROME	:	Wilson Airport (Nairobi)
TYPE OF FLIGHT	:	Private (VFR)
NUMBER OF PERSONS ON BOARD	:	One
INJURIES	:	None
NATURE OF DAMAGE	:	Engine oil cooler, cowling and skin
CATEGORY OF OCCURRENCE	:	Incident
PILOT IN COMMAND	:	Toby Dunn (YK-4430-CL)
PIC FLYING EXPERIENCE	:	10200 hours

*Times given in this report are Coordinated Universal Time (UTC)
East African Local Time is UTC plus 3 hours.*

EXECUTIVE SUMMARY

Notification

On the afternoon of 29 December 2014, the Air Accident Investigation Department was notified of an incident in Karai area just after the Zone Boundary. The incident involved a Cessna 180 aircraft of registration 5Y-KNJ, which was on a private flight from Mbaruk in Elementaita to Wilson Airport, Nairobi. The pilot was the sole occupant in the aircraft. He reported conducting preflight and power checks at Mbaruk before the flight and everything was normal.

Flight Narration

According to the pilot, he took off from Mbaruk at 1005 hours on a routine private VFR flight to Nairobi Wilson Airport. He reported that he flew regularly along the route which was very familiar to him. At approximately 1023 hours upon reaching the Zone Boundary, the pilot reported that he called Wilson Tower as per the standard operating procedures. The aircraft was at this point descending to Wilson Airport. At 1025 hours, the pilot reported that the aircraft struck a marabou stork bird during descend at approximately 8000 feet above mean sea level (AMSL).

After the bird strike, the pilot observed that engine immediately started losing oil pressure. He reported the incident to Wilson Tower indicating that he was 10 miles from the Monastery and was searching for an open field to land. According to the pilot, the aircraft was losing altitude and he decided to make a precautionary landing at an open field in Karai area. At approximately 1030 hours, the aircraft landed safely. The pilot reported that he immediately shut-off the engine after touchdown. Another aircraft flying in the area relayed information that 5Y-KNJ had landed on ground and was safe. Eyewitnesses reported that they observed the aircraft flying low and after the bird strike it quickly lost altitude. It was also observed that the aircraft appeared unstable as it approached to land.

Aircraft Inspection

Visual examination of the aircraft on ground revealed evidence of bird remains and oil on the surface of the engine, engine cowling, oil cooler, windshield, right side of the fuselage, vertical stabilizer and right horizontal stabilizer. Damage to the aircraft was limited to oil cooler, engine cowling and the right surface of the fuselage. The impact with the bird left dents, scratches and a crack on the engine cowling and the fuselage. There was also a visible stud on the oil cooler separated from its original position. A close examination of the damage indicated that the bird struck the lower right side of the engine cooler and the cowling. The bird was likely flying upwards from below the aircraft. The aircraft touched down at a heading of approximately 161° SE. It then rolled for approximately 435 meters before coming to rest.

Injuries

The pilot did not sustain any injuries as a result of this incident. There was no injury to any third party or damage to private property.

Location

The area close to the location of the bird strike was swampy and there was a man-made water dam nearby. This served as an attraction for various types of birds including the Marabou stork. The altitude of the incident site was 6500 feet AMSL.

Pilot Qualification

The pilot held a valid Commercial Pilot License YK-4430-CL. His experience record indicated that he had accumulated a total of 10200 hours at the time of incident. 500 hours of this was his experience on the Cessna 180 aircraft type. The pilot had flown for 0.4 hours in the last 7 days, 15 hours in the last 30 days and 100 hours in the last 90 days.

Weather

According to the pilot, there was no adverse weather at the time of the occurrence. Wind speed was 2-3 knots and visibility was better than 5 KM. Outside temperature was 25°C.

Aircraft Information

Aircraft documents were reviewed and found satisfactory for the flight conducted. The Certificate of Airworthiness was valid until 12 May 2015. The aircraft was appropriately registered and was certificated under the General Aviation category.

Safety Recommendation

It is recommended that KCAA to conduct risk analysis of the impending bird activity at the vicinity of the Control Zone Boundary near Karai with the objective of assessing the suitability of issuing a NOTAM as appropriate.

Photographs showing the aircraft after landing following bird strike and the lake inhabited by birds





Martyn Lunani
CHIEF INVESTIGATOR OF ACCIDENTS
12/01/2015