

**MINISTRY OF COMMUNICATION AND TRANSPORT  
ACCIDENT INVESTIGATION BRANCH**

**CIVIL AIRCRAFT ACCIDENT No.CAV/ACC/19/97**

**REPORT ON THE ACCIDENT TO CESSNA 404  
AIRCRAFT REGISTRATION No. 5H-THF  
WHICH OCCURRED ON 26 DECEMBER 1997  
AT LOBO AIRSTRIP, SERENGETI NATIONAL PARK, TANZANIA.  
(0201S 3510E)**

## TANZANIA ACCIDENT INVESTIGATION BRANCH

### AIRCRAFT ACCIDENT No. CAV/ACC/19/97

**Aircraft Type:** : Cessna 404 Titan

**Nationality** : Tanzania

**Registration Marks** : 5H-THF

**Engines** : Two Continental GTSIO-520M

**Registered Owner** : Northern Air Ltd  
P.O. Box 2782  
Arusha TANZANIA

**Operator** : Same as Registered Owner

**Pilots** : One - Uninjured

**Passengers** : Nil

**Place of Accident** : Lobo airstrip, Serengeti National Park, Tanzania.  
(02 00.59S 35 09.54E)

**Date and Time of Accident [UTC]:** 26 December 1997 at 1118 hours.

## **SUMMARY**

The aircraft flew from Ndutu airstrip in order to pick up a party of tourists from Lobo airstrip. Both airstrips are in the Serengeti National Park. 5H-THF was carrying one pilot, who was the sole occupant. The aircraft made a successful touchdown on runway 09 of Lobo airstrip. During the landing roll the pilot saw a person moving to the runway with what looked like a Video Camera in his hands. He made heavy braking to slow down the aircraft but it collided with the photographer before it could be stopped. The photographer sustained fatal injuries but the damage to the aircraft was confined to the wing tip.

The report concludes that the accident was caused by a trespasser colliding with the aircraft whilst it was executing a landing roll.

## 1. FACTUAL INFORMATION

### 1.1 History of the flight

The aircraft flew from Ndotu to pick up a party of tourists from Lobo airstrip. It took off at 1059 hours with the pilot as the only occupant. He was flying under visual flight rules.

The pilot said that he had arrived overhead Lobo at 1116 hours and positioned for landing on runway 09. The runway was clear with his passengers waiting on the apron. When he turned for the final approach the runway was still clear.

5H-THF crossed the threshold and touched down at 1118 hours. When the aircraft had rolled another 60 metres the pilot saw a person moving from the parking area towards the runway with something that looked like a video camera in his hands. (See appendix). Due to the limited width of the runway he could not steer the aircraft to the right. He made heavy braking to slow down the aircraft but it collided with the photographer before it could be stopped.

The photographer sustained fatal injuries but the damage to the aircraft was confined to the left wing tip.

### 1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	--	--	1
Serious	--	--	--
Minor/None	1	--	--

### 1.3 Damage to aircraft

The left wing tip suffered impact damage to its tip. No other damage was identified.

### 1.4 Other damage

There was no third party damage.

### 1.5 Personnel information

The pilot, Capt. Alphey Shao was born on 5 December 1954 at Rombo, Moshi. He held an ATPL No. HP 257 granted on 7 September 1984 on the strength of his Kenya ATPL No. YK 2186 dated 13 November 1989. He also held a Radio Telephony Operator's Licence No. H-685 which was kept current in line with his ATPL. By the time of the accident his licence was valid till 6 May 1998.

He was rated on the following aircraft in Group I:

DHC 6, Cessna 401/402, Cessna 404, Beechcraft BE 55/58

By the time of the accident his total flying experience was 8962 hours of which about 2000 were on the type.

## **1.6 Aircraft information**

The aircraft, a Cessna 404 Titan Serial No.0835 powered by two Continental GTSIO-520M engines was manufactured by the Cessna Aircraft Company at Wichita, Kansas, U.S.A. in 1981. It arrived in Tanzania with U.S. registration marks N6807T. It was subsequently registered 5H-THF in the name of Tanzania Game Tracker Safaris P.O. Box 2782 Arusha on 16 June 1987. A Certificate of Registration No. 307 was issued.

A Tanzania Certificate of Airworthiness No. 261 was issued on 23 June 1987 to expire one year later. The C of A had since been kept current though periodic renewals. By the time of the accident the C of A was valid till 29 June 1998. The aircraft was being operated in the Public Transport Category.

### **1.6.1 Loading and C of G Disposition**

The aircraft was correctly loaded.

## **1.7 Weather**

It was a bright clear day. The weather was not a factor in this accident.

## **1.8 Aids to Navigation**

Not applicable.

## **1.9 Communications**

Not applicable.

## **1.10 Aerodrome information**

Lobo airstrip, elevation 5500 feet (1676 metres) had one grass runway (09/27) which is about 1200 metres long. Its width varies from 14 to 19 metres along its length. Runway 09 has an uphill gradient for the first 400 metres after which it levels off.

At the point of collision with the trespasser the runway was 15.5 metres wide. The trespasser was standing 1.5 metres inside the runway and 205 metres from the beginning of the runway.

The edges of the runway are outgrown by short grass and tropical savanna trees most of them ranging from one to four metres tall. Some of these trees are to be found as close as three metres beyond the edges of the runway. Animals, notably gazelles and buffaloes, often graze on the runway and the surrounding areas. There was no wind sock at the time of the accident. Pilots who often use the airstrip said there was a

perpetual cross wind blowing from 030°.

#### **1.11 Flight recorders**

Not required by regulations. None fitted.

#### **1.12 Wreckage information**

Shortly after the accident the aircraft was pushed to the apron in order to clear the runway for further flights into and out of Lobo airstrip.

The aircraft was found on the apron two days after the accident. Damage to the aircraft was confined to the tip of the left wing which collided with the trespasser during the landing roll.

The front section of the wing tip was detached from the leading edge of the wing. Its fibre glass surface was shattered by the collision impact. However, the rear section of the wing tip was still attached to the wing and was not damaged.

Two pairs of spectacles with broken glasses and frames were found near the blood stained spot where the deceased fell after impact with the aircraft.

The first tyre marks attributable to 5H-THF were found 60 metres from the beginning of runway 09. The first signs of heavy braking were found some 120 metres from the beginning of the runway. The collision spot was located 85 metres from the point where heavy braking started.

#### **1.13 Medical and pathological information**

There was nothing in the pilot's medical history which could have contributed to this accident.

It was not possible to obtain the medical history of the trespasser. During the post-mortem examination of the trespasser's body at Arusha, no tests were made to establish whether the deceased was under the influence of drugs.

The deceased sustained injuries to his neck, left arm and skull.

#### **1.14 Fire**

There was no fire.

#### **1.15 Survival aspects**

The injuries sustained by the trespasser were not survivable.

#### **1.16 Tests and Research**

Not applicable.

## 1.17 The Trespasser

The trespasser was one of a party of 14 French tourists who had recently arrived in the country. They first visited Seronera and flew over the Serengeti National Park in a balloon. Game Wardens at Seronera said that one of the tourists, Mr Michel Perel Muter, looked agitated and was very difficult to handle. This tourist was later involved in the accident at Lobo.

On 26 December 1997, two aircraft, a Cessna 206 registration No. 5H-TGT and a Cessna 404, 5H-THF were chartered to pick 14 tourists from Lobo airstrip in the Serengeti National Park for flights to Arusha. Three of the tourists were booked on 5H-TGT and the rest were booked on 5H-THF. They were all scheduled to take off at 1000 hours.

5H-TGT was first to arrive at Lobo at 0950 hours. The vehicles carrying the tourists arrived at the airstrip at 0945 hours. The commander of 5H-TGT informed the tourists that 5H-THF was to arrive late by 40 minutes due to the weather in Nairobi.

When the first party of three tourists boarded the aircraft, one of the 11 remaining passengers requested the commander of 5H-TGT to take him as well. He insisted that 40 minutes was too long for him to wait at the airstrip.

When the request was refused on the grounds that he was not booked on that flight, the tourist became irritated. He threatened to return to Lobo Lodge on foot not withstanding the presence of dangerous animals on his way. Lobo Lodge is three kilometers away from the airstrip and clients are not permitted to walk on foot in the National Park en route to the lodge.

This tourist subsequently took his video camera and started filming the departing Cessna 206, 5H-TGT right from the engine start to the time when it took off and disappeared. He also continued complaining bitterly about the delay till 5H-THF arrived, whereupon he moved from the apron to the runway and started filming the landing aircraft. He remained standing on the runway with his camera locked on the aircraft till when he was struck by the left wing. He died on the spot.

## 2. ANALYSIS

5H-THF made a normal approach to runway 09 of Lobo airstrip. If it were not for the trespasser running into its path on the runway, the landing roll would also have been normal.

The only purpose of the tourist going on the runway appears to have been to get a clear view of the aircraft which he was filming. Standing only 1.5 metres from the edge of the runway he probably thought he was outside the aircraft path. He probably did not appreciate how narrow this runway was (15½ metres wide at the point of collision).

It is also probable that he thought that the aircraft would be able to slow down and turn for parking on the apron as the Cessna 206 had done 40 minutes before. (See appendix)

This photographer had also been viewing the oncoming aircraft through the camera's telescopic lens. In the circumstances, 5H-THF may have appeared to him to be some longer distance away than it actually would have been when seen with naked eyes. Indeed body injuries showed that the aircraft wing tip had collided with the person's left arm and neck indicating that he had already turned right to escape when the collision occurred.

The pilot first saw the trespasser on the runway at a distance of about 105 metres. With the aircraft wing span of 14 metres and the runway being very narrow, it was not possible to steer it away from the centre-line at 70 kt without risking collision with trees beyond the edges of the runway.

### 3. CONCLUSIONS

#### [a] Findings

- [1] The pilot was properly licenced and medically fit to conduct the flight.
- [2] The aircraft was well maintained and its documents were in order.
- [3] A photographer trespassed on the runway and collided with the aircraft which was executing a landing roll.

#### [b] Cause

The accident was caused by a photographer colliding with the landing aircraft during landing roll.

# APPENDIX

ACCIDENT TO CESSNA 404  
5H THF AT LOBO AIRSTRIP  
ON 26 DECEMBER 1997

