



# AIB Bulletin

**AIB Bulletin No. 16**

**Ref.:** CAV/ACC/16/04

**Category:** 1.1

**Aircraft Type & Reg.:** Let 410 UVP-E20    **Reg.** 5H-PAC    **Serial No.** 871904

**No. & type of Engines:** Two Walter M601E

**Year of Manufacture:** 1987

**Date and Time (UTC):** 16 November 2004 at 0509 hours

**Location:** Kilimanjaro International Airport (03 25 55 S 037 04 40 E)

**Type of Flight:** Training flight

**Persons on Board:**                      **Crew -** 2                      **Passengers -** Nil

**Injuries:**                                      **Crew -** Minor                      **Passengers -** N/A

**Nature of Damage:** The aircraft was destroyed by impact with the ground.

**Commander's Licence:** ATPL

**Commander's Age:** 49 years

**Commander's Experience:** 14000 hours of which 4000 were on type

**Last 90 days:** 229hrs

**Last 28 days:** 52 hrs

**Information Source:** Telephone call from the operator

## ALL TIMES UTC

### History of the Flight

The aircraft was on a base training flight at Kilimanjaro International Airport. At 0410 hrs it was cleared to the local flying area for upper air works, followed by VOR/ILS approaches to runway 09 via NDB **KB**. 5H-PAC took off and proceeded to the local flying area where the crew members did upper air works for about 30 minutes. According to the commander, these included clean and dirty stalls, level flights at different speeds, 45 degree turns left and right and exercises on unusual attitudes. Subsequent to these they returned to the airport via NDB **KB** for ILS approach to runway 09. They carried out a missed approach and proceeded to join RH circuits for touch-and-go operations on runway 09. The last operations before the accident was simulated engine failure after take off followed by single engine overshoot, this time using runway 27.

This was approved and the commander was reminded that the surface wind was 090 degrees 08 knots. The aircraft turned left

and positioned on right base for runway 27. It was subsequently given a landing clearance. The weather at the material time was fine with temperature 23 degrees Celsius.

The controller, who was handling the flight, said that the final approach was perfect. The landing gear was down. The aircraft passed the threshold of runway 27 at about 70 feet above the ground and continued to flare on a straight and level attitude with the landing gear retracted. It continued in this attitude for a distance of about one and a half kilometers down the runway subsequent to which it drifted off the runway to the right. The controller asked the pilot to explain his intentions. There was no reply. Instead, the aircraft was observed to yaw violently as it drifted further to the right. Moments later, it impacted the ground on a grass hedge and skidded along the width of taxiway Y before it came to rest. The commander said that he repossessed the controls immediately when the aircraft started yawing but there was no time effect recovery.

There was fuel spillage but fire did not break out. The two pilots, who had not put on their shoulder straps, sustained facial injuries.

### **EXAMINATION OF THE WRECKAGE**

5H-PAC first impacted the ground on a grass hedge to the right of runway 27 and skidded to the nearby taxiway where it came to rest. Fuel tanks were ruptured on impact causing fuel spillage on the taxiway. The airport fire brigade had to apply foam on the taxiway before the wreckage could be accessed.

The aircraft sustained extensive damage to both wings, the nose section and the fuselage. The right propeller, which was feathered, sustained no damage. However, the left propeller sustained rotational impact damage on all blades. Both wings had all spurs broken and the fuselage broke just forward of the wings.

The ground impact marks seemed to indicate that it was the right wing that hit the ground first followed by the nose and the left wing. However, some eyewitnesses said that it was the left wing which hit the ground first. The landing gear was up and locked. The flaps were set at 18 degrees.

## **KILIMANJARO INTERNATIONAL AIRPORT**

Kilimanjaro International Airport, elevation 2900 feet, has one runway 09/27 which is 3607 meters long and 45 meters wide. The surface is tarmac and was in good condition at the time of the accident. A private company, The Kilimanjaro Airport Development Company Ltd, operates the Airport.

## **ANALYSIS**

The circumstances of the accident indicate that the aircraft was not under control at the time of impact with the ground. Its configuration is consistent with the intended single engine overshoot operation, which was the subject of the training exercise. The crew reported no malfunction of equipment or engine. The approach was normal but the landing gear was retracted at the threshold without positive climb. The swing to the right most probably occurred as a result of the application of power on the left engine without the appropriate rudder compensation.

## **CONCLUSIONS**

Given that the aircraft was practicing a single engine overshoot, the pilot appears to have descended too low for safe recovery. The landing gear should also have been retracted after power had been applied and positive climb achieved.

The standard single engine overshoot procedure was not applied.