



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF COMMUNICATION & TRANSPORT
ACCIDENT INVESTIGATION BRANCH

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AIB Bulletin

AIB Bulletin No: 14

Ref: CAV/ACC/14/00

Category: 1.2

Aircraft Type:

LET 410 UVP-E20

Reg. 5H-HSA

Serial No. 972730

No & Type of Engines: 2 Walter M 601 E

Year of Manufacture: 1997

Date: & Time (UTC): 5th November, 2000 at 1210 hours

Location: Mwanza Airport – Apron (Lat 02 26.65S Long. 32 55.45E)

Type of Flight: Public Transport (Passengers)

Persons on Board.

Crew -2

Passengers - 2

Injuries:

Crew - Nil

Passengers - Nil

Nature of Damage:

Substantial damage to the door, the right wing, propeller and the fuselage.

Commander's Licence: ATPL

Commander's Age: 50 years

Commander's Experience 13,700 Hours of which 980 were on type

Last 90 days – 224 hrs.

Last 28 days – 65 hrs.

Information Source:

Telephone call from Mwanza Air traffic Services.

ALL TIMES UTC

The Bulletin contains facts relating to the accident which have been determined up to the time of issue. This information is published to inform the public and the aviation industry of the general circumstances of the accidents at the preliminary/stage and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

Short extracts can be published without specific permission providing that the source is duly acknowledged.

Flight EY 138 had boarded two passengers and two crew ready for a flight to Bukoba. At about 1200 hours the Commander called for engine number two start after asking the first officer if everything was clear. The first officer affirmed and engine No. 2 (RH engine) was started successfully and stabilized at idle run.

The Commander said that whilst starting the engine some ground personnel were still securing the main cabin entry door on the left hand side of the aircraft. Since it was taking a long time to secure the main entry door, it seemed as if personnel who were securing the door had some problem in closing it. It was at this juncture that the Commander decided to move and check what was happening to the main door, that on second thoughts he called upon his first officer to check again if the emergency door on the right hand side was locked.

The first officer observed that the door was in a closed position but not locked. He attempted to rotate the handle in order to secure the emergency door while in the closed position but could not manage. He then opened the door so that he could get a better leverage to align the door bolts with the holes in the door frame and hence lock the door. The first officer said that during this process the door handle slipped from his hand and swung wide open.

The door was struck by the rotating propeller and this action ripped it off the fuselage, and it subsequently collided with the right hand main plane leading edge inboard of the engine nacelle. It also hit the fuselage on RH side near station 9 where it dented and buckled the skin. The former which is attached to the skin at this station suffered a small crack. All the five blades of the right hand propeller were bent.

The right hand engine was shut down after this occurrence. There was no injury to the crew and the passengers. They all disembarked normally. There was no third party damage. The engine was checked and was found to be serviceable.

When the investigating inspector arrived in Mwanza he found that the Operator's maintenance personnel had already worked on the accidented aircraft. The damaged propeller was removed and replaced by another propeller. The door had also been replaced. An inspection on the engine and fuselage for ferry flight purpose had already been carried out.

The circumstances leading to this accident are being investigated. However following the investigation so far conducted it is apparent that some shortfalls contributed to the accident.

During the engine start operation the two flight crew members were not using the check list. Even if the condensed check list prepared by the company had been used, it is questionable whether it would have served to prevent this particular accident.

The company condensed check list called for the emergency door latch to be in the open position before engine start. It also did not indicate the stage at which the emergency door latch should be set in the "locked" position.

QUICK REFERENCE CHECK-LIST FOR NORMAL OPERATIONS
L410

<p>BEFORE START FWD COMPARTMENT BAGGAGE DOOR EMERGENCY DOOR LATCH PARKING BRAKE HEATING LEVERS TOL PCL FUEL CONTROL COCKS FUEL SHUT OFF LEVERS (EMERGENCY THROTTLE LEVERS) FLYING CONTROLS FUEL QUANTITY REVERSE THRUST LEVER CBS UNDER GLASS COVER CENTRE OF GRAVITY POSN ALTIMETERS NOSEWHEEL STEERING ANTI-SKID</p> <p>ENGINE STARTING BATTERY I, II INVERTER 36V I</p>	<p>CLOSED/LOCKED OPEN STOP (PRESS CHECK) CLOSED IDLE FEATHER OPEN</p> <p>CLOSED FREE CHECK REMOVED ON % SET MANUAL ON</p> <p>ON (MIN 20V) ON</p>	<p>BEFORE TAKE OFF COCKPIT WINDOWS NWS SEARCH LIGHTS TAXING I, II STOP WATCH</p> <p>AFTER TAKE OFF BRAKES GEAR FLAPS SEARCH LTS CLIMB POWER SPOILER ABC AUTOFEATHER AIR CONDITION ALTIMETERS</p> <p>DESCENT FASTEN SEAT BELT ALTIMETERS SETTING</p>	<p>CLOSED PEDAL (GREEN LT ON) ON START</p> <p>PRESS(CHECK LIGHTS) UP UP OFF ADJUST OFF AS REQUIRED 1013 SET - TRANSITION ALT</p> <p>ON SET QNH AT TRANSITION LVL PA</p>
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TCAA and the operator should take immediate action to address the following:

- I. The Operator's General operations manual should be reviewed to include safety measures pertaining to particular aircraft series.
- II. The operator should ensure that check lists are used during aircraft operation.
- III. The operator should ensure only qualified personnel and in this case only pilots operate the aircraft doors – where there is no cabin attendant.
- IV. TCAA should ensure correct check lists are being used by the operator at all times.