



AIB Bulletin

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AIB Bulletin No. 1

Ref: CAV/ACC/1/08

Category: 1.3

Aircraft Type:

Cessna FRA 172E **Reg.** 5H-FUN **Serial**

No. 0027

No. & type of Engines:

TCM IO-360-D31

Year of Manufacture:

1968

Date and Time (UTC):

13 February 2008 at 1130 hours

Location:

Moshi industrial area 1.7 km east

of the airport.

(S 03 21 72.0 E 037 20 47.2)

Type of Flight:

Skydiving flight.

Persons on Board:

Crew -3

Passengers

-1

Injuries:

Crew -2 Killed, -1 Serious **Passengers**

-1 Serious

Nature of Damage:

Aircraft completely destroyed.

Commander's License:

CPL

Commander's Age:

35 years

Commander's Experience:

2100 hours

Last 90 days - Unknown

Last 28 days - Unknown

Information Source:

Kilimanjaro ATS

ALL TIMES UTC

History of the Flight

The aircraft arrived at Moshi at 0825 hours from a Check I inspection in Dar es Salaam. Three seats were taken out and the remaining seat was occupied by the pilot. On sky diving missions the three parachutists sit on the floor. One passenger and another crew of two, a photographer and a jumpmaster, boarded the aircraft for a sky diving flight. The photographer was sitting on the right of the pilot facing the jumpmaster who was already strapped

to the passenger for the sky diving operation. At 1120 hours 5H-FUN took off from Moshi airport using runway 08. Eye witnesses who were on the aircraft flight path about 2 km east of the airport said that they saw the aircraft flying overhead with the engine spluttering (misfiring).

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 circumstance of the accident 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.

However, the engine was later heard to run smoothly and the aircraft continued in the same direction and disappeared. Several minutes later, the aircraft was seen flying in the opposite direction i.e. towards the airport, with the engine misfiring again. The engine subsequently emitted a screeching sound as if two pieces of metal were rubbing against each other and subsequently stopped. The aircraft proceeded in the same direction but moments later it was seen to turn left as if it was heading for the adjacent tarmac road. However, the turn developed into a nose down spiral dive. The aircraft hit the surface of a tarmac road in a nose down position. It came to rest on the road 15 meters beyond the point of impact. There was no fire but the aircraft was destroyed by impact with ground.

All the occupants were extricated alive from the wreckage. The pilot died at the crash site and the photographer died in a Moshi hospital on the same day. The remaining two occupants were seriously wounded. They were initially admitted at the Moshi KCMC hospital and were later flown to Nairobi hospital for treatment.

A cyclist near the crash site was hit by pieces of a broken fiber glass door from the crashing aircraft and fell off his bicycle. He sustained injuries to his right arm and chest.

The crash site

The aircraft came down on a tarmac road in the industrial area of Moshi town. In its spiral dive to earth it narrowly missed a line of BP fuel and gas tanks. There was an impact crater in the middle of the road made by the spinner/propeller hub. From the mark made by the propeller on the ground it was evident that the propeller was stationary at the time of the impact.

There is a 210 meters long, wedge shaped empty space with goal posts on the eastern side of the crash site. This space lies in between the tracks of the Arusha and Tanga railway lines and is used as a football ground. There is also a Brewery on the western side of the crash site just beyond the BP fuel installations.

The wreckage

It was evident from the examination of the wreckage that the aircraft hit the ground in a near vertical position. The leading edges of both wings showed direct impact damage. There were no signs of impact damage on the flaps and ailerons.

The instrument panel was completely dislodged by the impact force and all instruments were rammed into the cabin. The rear fuselage portion and the tail plane suffered relatively less damage.

Personnel information

The pilot was born on 26 May 1972 in Kagera, Tanzania. He held a Commercial Pilot's License No. HP 585 issued on 12 August 2002 on the strength of his FAA CPL No. 2681923 issued on 9 January 2002.

He had the following ratings on his License:

Group I: Cessna 182, 206, 172, 404

Piper PA34

Partenavia P68

At the time of the accident he claimed a total flying experience of 2100 hours.

Aircraft information

The aircraft, a Cessna FR 172E serial number 0027 powered by one TCM IO-360- D31 engine was manufactured by Reims Aviation S.A. at Reims in France in 1968. It arrived in Tanzania in 1988 with registration letters OY-AHI in the name of Finn K. Mortensen, Tommesnvei 12, 8450 Hammel, Denmark.

It was registered in Tanzania (5H-FKM) on 24 March 1988 in the name of Finn K. Mortensen, P.O. Box 620 Zanzibar. A Certificate of Registration number 314 was issued.

On 29 July 1994 the ownership was transferred to Jukka Niskala Ltd P.O. Box 3052 Dar es Salaam and the aircraft registration was changed to 5H-FUN.

On 9 January 2006 the aircraft was registered in the name of Jamal B. Mallya P.O. Box 1062 Moshi. The ownership was finally transferred to Serengeti Balloon Safaris P.O. Box 12116 Arusha on 11 June 2007.

A Tanzania Certificate of Airworthiness number 268 was issued on 30 May 1988 to expire one year later. The Certificate of Airworthiness has since been kept current through periodic renewals. By the time of the accident the Certificate of Airworthiness was valid till 1st October 2008. The airframe had logged a total 6639.3 hours.

The engine

The engine, a Teledyne Continental Motors IO-360-D31 serial number 063067-R was re-manufactured in 2000. It was fitted on 5H-FUN on 30 January 2001. By the time of the accident the engine had logged 815.6 hours.

The weather

It was a bright sunny day at the time of the accident. The temperature was estimated at 32 degrees Celsius. The weather does not seem to have any bearing on this accident.

Remarks

The aircraft had flown from Dar es Salaam to Moshi only three hours before the accident flight. No snags were reported. There was

no refueling at Moshi. From the statements of eye witnesses the engine started misfiring shortly after take off. However, it appeared that the engine picked up after a short time and this may be the reason why the flight was continued.

The pilot appears to have decided to return to the airfield due to the recurrence of the engine problem. He may have decided not to force land because the engine had not stopped. In fact he flew over a foot ball field just before he crashed.

The pilot appears to have initiated a left turn in order to force land on a tarmac road which ran almost at right angles to the direction of flight. The aircraft appears to have stalled and crashed whilst executing a powerless turn to the left.

Further work

The engine and the propeller have been confiscated for further investigations into the cause of the accident.