

No. 8

Avianca, DC-3, HK-109, accident on Pan de Azucar Peak, San Vicente de Chucuri, Colombia, on 22 March 1965. Report dated 1 September 1965, released by the Administrative Department of Civil Aviation, Colombia

1.- Investigation1.1 History of the flight

Flight 676 was a scheduled domestic flight from Eldorado Airport, Bogotá to Bucaramanga. It departed Bogotá at 1358 hours, local time. At 1450 hours it reported over Cimitarra at 9 000 ft in VMC, estimating Bucaramanga at 1510 hours. This was the last communication from the flight. When information of arrival was not received at the airport of destination, a state of alert was declared at 1522 hours and an emergency was subsequently declared at 1540 hours.

The wreckage of the aircraft was located on 24 March at an altitude of approximately 7 200 ft on the peak known as Pan de Azucar, 35 NM from Bucaramanga on a magnetic bearing of 45°. The co-ordinates of the accident site were 06°58'N, 74°56'W. The accident occurred at approximately 1455 hours.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	3	25	
Non-fatal			
None			

1.3 Damage to aircraft

The aircraft was destroyed.

1.4 Other damage

There was no other damage.

1.5 Crew information

Both the pilot-in-command and the co-pilot held valid licences with ratings for the DC-3. Their medical certificates were also valid. The pilot-in-command had flown a total of 6 201 hours with Avianca, including 268 hours as pilot on the DC-3. The co-pilot had flown a total of 4 941 hours, all on the DC-3.

Also aboard was a flight attendant.

1.6 Aircraft information

The aircraft had a valid certificate of airworthiness. The inspection and maintenance procedures for the aircraft and its components had been performed according to the regulations established.

At the time of the accident the aircraft had a total of 32 455 hours, including 369 hours since the last partial overhaul.

The aircraft was correctly loaded and the centre of gravity was within the prescribed limits.

The type of fuel being used was not stated in the report.

1.7 Meteorological information

The crews who took part in the search on the day of the accident reported a strong reduction in visibility due to smoke in the area between Cimitarra, Barrancabermeja and Bucaramanga, and accumulation of clouds towards the mountains range.

Also, the investigating commission noted at the accident site that after midday, apart from the visibility reduction caused by smoke, there were stratus clouds intermittently covering the peaks for periods of up to one hour.

Study of the actual meteorological conditions at different stations along the route indicated that, between 1300 and 1700 hours, there was a strong reduction in wind speed (except at Bogotá) in all directions, requiring flight by instrument flight rules.

1.8 Aids to navigation

No information was contained in the report.

1.9 Communications

Communications were normal until 1450 hours when the last report from the aircraft was received. There was no indication of any difficulty.

1.10 Aerodrome and ground facilities

Not pertinent to the accident.

1.11 Flight recorders

Not mentioned in the report.

1.12 Wreckage

The altitude of the Pan de Azúcar Peak is 7 600 ft and the impact occurred at an altitude of 7 200 ft. First, the nose of the aircraft tore up some vegetation, then it entered a gorge or ravine about 12 m wide, 8 m deep and with a gradient of about 80°. Approximately 6 m after the first contact of the aircraft with the vegetation, the wings struck the sides of the ravine and broke off. Eight metres further the fuselage struck the ground and a fairly stout tree, some of the wreckage, then fell backwards about 5 m down the slope.

1.13 Fire

After the impact there was a violent outbreak of fire which melted a large quantity of the aircraft and burned its occupants.

1.14 Survival aspects

This was a non-survivable accident.

1.15 Tests and research

None mentioned in the report.

2. - Analysis and Conclusions

2.1 Analysis

It was determined that the accident occurred at approximately 1455 hours, local time. In the period between 1450 hours (when the last aircraft position report was received) and 1455 hours (the time of impact), no call was received indicating any abnormal situation affecting the technical efficiency of the aircraft.

The crew of the aircraft reported visual flight conditions at all times, and it was therefore believed that the crew were flying according to visual flight rules. However, evidence indicated that the existing meteorological conditions implied flying in IMC (see 1.7).

2.2 Conclusions

Findings

The crew members held the required licences and were qualified to fly the DC-3.

The aircraft had a valid certificate of airworthiness. Maintenance had been carried out in compliance with the established procedures.

Prior to the accident no report was received indicating malfunctioning of the aircraft or emergency conditions.

Outside Eldorado Airport, the meteorological conditions that prevailed required flight under instrument flying rules.

The crew conducted the flight under visual flight rules.

The flight path of the aircraft at the moment of impact against the mountain was 45°.

Cause or
Probable cause(s)

The pilot-in-command continued to fly VFR in unfavourable meteorological conditions which necessitated operation by instrument flight rules.

3. - Recommendations

All pilots should be reminded of their obligation to observe instrument flight rules when meteorological phenomena exist on the routes to be flown and to observe the airways system established in these conditions.
