

No. 8

AVISPA, DC-3, HK-524 accident at Serrania del Baudó, Department of the Chocó, Colombia, 22 April 1962. Report released by the Air Safety Division, Civil Aeronautics Department, Colombia.

1. Historical1.1 Circumstances

The aircraft departed Bahía Solano at 1020 hours local time on a non-scheduled domestic flight to Quibdó carrying a crew of 4 and probably \* 36 passengers. Following departure the aircraft was not heard by any radio station, and there is no knowledge of any departure information or position report having been received from it. The accident occurred at 1045 hours.

The wreckage of the aircraft was located four days later about thirty-one miles from the airport on Bonito Peak, at an elevation of 2 400 ft.

1.2 Damage to the aircraft

The aircraft was destroyed.

1.3 Injuries to persons

All persons aboard the flight died in the accident.

2. Facts ascertained by the Inquiry2.1 Aircraft information

The aircraft's certificate of airworthiness was valid until 25 April 1963 and the aircraft had been properly maintained.

The aircraft's certificate permitted it to carry 31 persons, including crew members. However, at the time of the accident the following were believed \* to be aboard: 4 crew, 29 passengers, 5 infants in arms and 2 children.

The Colombian Civil Aeronautics Department had introduced a weight limit of 11 431 kg for all aircraft of this type engaged in passenger transport in Colombia. At the time of the accident the aircraft's weight was about 12 002 kg, i. e. 571 kg in excess of the figure allowed for aircraft engaged in passenger transport.

As Bahía Solano is a fourth category airport the pilot-in-command should have completed a weight and balance manifest. He failed to do so.

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\* The state of the wreckage did not permit positive identification of bodies.

## 2.2 Crew information

The crew was made up of a pilot-in-command, co-pilot, flight engineer and steward. Both pilots held valid licences and medical certificates. The pilot-in-command and co-pilot had totals of 7 645 and 6 606 flying hours respectively. They had flown 1.20 hours during the last 24 hours.

## 2.3 Weather information

The actual weather conditions en route are not known.

## 2.4 Navigational aids

The aircraft was fitted with two ADF's. The low power radio beacons at Quibdó and Condoto were functioning normally.

## 2.5 Communications

There was no contact between the aircraft and any radio stations. The radio frequencies at Quibdó were operating normally.

## 2.6 Aerodrome installations

Not significant.

## 2.7 Fire

A fire occurred following the accident.

## 2.8 Wreckage

No details given in the report.

## 3. Comments, findings and recommendations

### 3.1 Discussion of the evidence and conclusions

The aircraft hit Bonito Peak while climbing at an approximate speed of 130 kt. The manner of impact, the elevation of the accident site (2 400 ft), and of the peak (3 000 ft) and the heading of the aircraft at the time of the accident showed that it was flying the Bahía Solano - Quibdó route under instrument flight rules conditions below the prescribed flight level.

It was not possible to ascertain whether emergency conditions existed at that time as no information was received from the aircraft while in flight. Also, owing to the inaccessibility of the accident site and the destruction of the wreckage it was not possible to reconstruct the accident.

Even if emergency conditions had existed, the overloading of the aircraft would not have been a decisive factor in causing the accident. In accordance with the structural limitations, including the limitation for the strength of landing gear and taking into account its ability to fly up to 7 900 ft with one engine inoperative and the other at 2 500 rpm, full throttle, 103 mph (90 kt) TIAS, with Hamilton Standard 23-E-50 propellers, the aircraft could operate up to a maximum of 12 202 kg.

### 3.2 Probable cause

The cause of the accident was not determined. Possible contributing factors were:

- 1) weather conditions at the time; or
- 2) an error of the pilot in flying at an altitude unsuited to the route.

### 3.3 Recommendations

Recommendations were made to:

- 1) penalize AVISPA airlines for failing to complete correctly the weight and balance manifest at a fourth category airport;
- 2) penalize AVISPA airlines for infringing the aircraft's airworthiness certificate by carrying out the flight with 571 kg of excess cargo and 3 to 7 excess passengers;
- 3) provide regulations under the authority of the Civil Aeronautics Department governing the transport of infants in arms.

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