No. 6

Líneas Aéreas de Nicaragua S.A., DC-3, AN-AEC, crashed into the east side of Concepción Volcano on the Island of Ometepe in the Great Lake of Nicaragua, on 23 January 1957.

Report released by the Ministry of War, Navy and Aviation, Republic of Nicaragua.

Circumstances

The aircraft was on a flight from Managua to Bluefields and San Carlos and then returning to Managua. It departed San Carlos for Managua at 1649 hours GMT carrying a crew of 3 and 13 passengers. This information was given directly by the captain over the aircraft's transmitters, as the radio station for point-to-point communication is in the town, some distance from the landing field. The aircraft made no further contact. It crashed into the side of Concepción Volcano at 1718 hours GMT at a height of 2 650 feet killing all occupants.

Investigation and Evidence

The aircraft crashed while performing a sharp ascending left curve at an altitude of 2 650 feet (according to the reading of the operating altimeter found at the accident site) and on a magnetic heading of 170°, i.e. 127° off its original course of 297°, and 350 feet below its cruising level, reported by the pilot as 3 000 feet.

Witnesses stated that the weather was clear and fog covered only the top of the volcano, from 3 200 feet to its summit. A number of persons saw the aircraft flying on its normal heading to Managua shortly before the accident. Had the weather been unfavourable the pilot could very well have taken the usual action of flying at an altitude above all obstructions on the route and would have reported such action.

It is surprising that the aircraft made no other contact than that mentioned above after leaving San Carlos, as this means that the aircraft flew over water without once making radio contact with its base station in 20 minutes. This indicates either malfunctioning of the aircraft's transmission equipment or negligence, the customary practice being to maintain constant contact with aircraft in flight.

Both trim tabs of the elevator control surfaces were at a 20° downward angle, for nose up. As the aircraft, at the time of the accident, was flying at cruising speed and was correctly balanced, this indicates that impact occurred when it was in a climbing position, possibly owing to desperate efforts by the pilot to counter some force greater than that which he was able to exert upon the control wheel. No doubt he decided at this point to use the assistance of the trim tabs, which, since they react slowly, did not respond in time to prevent the crash into the volcano's side.

The starboard wing was flattened and folded back over one-third of its length, in normal flight position, pointing to 1000 magnetic, and was partially separated from the fuselage. Most of the port wing, which was still attached to the fuselage, had burned.

The starboard engine was the portion most seriously damaged on impact, following which it rolled 400 feet downhill, scattering parts over its course.

All control surfaces of the tail unit were intact - only the fabric covering of the rudder and elevators had burned.

The propellers were broken off by the forces of impact and engine rotation, as indicated by the way the blades snapped off at the base.

Probable Cause

According to eyewitnesses, the aircraft made a left turn, i.e. towards

the volcano, and there were indications of abnormal conditions when it banked sharply in descent then in rapid climb; this shows that some trouble arose in the operation of the controls, propellers or engines, which unexpectedly caused loss of control. It was impossible to ascertain the cause of this malfunctioning, owing to the condition of total destruction of the aircraft after impact and fire.

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