No. 12

Royal Nepal Airlines Corporation, DC-3, 9N-AAH, accident in the vicinity of Tulachan Dhuri, 1 August 1962. Report released by His Majesty's Government of Nepal, Department General of Civil Aviation, 14 December 1962.

1. Historical

1.1 Circumstances

The aircraft was on a scheduled international flight from Kathmandu (Nepal) to New Delhi (India). No weather forecast was available before take-off. However, the pilot was to receive a forecast from New Delhi en route. The flight was cleared direct to New Delhi to cruise and maintain 8 500 ft and it took off from Gaucher Airport (Kathmandu) with 4 crew and 6 passengers aboard at 1221* hours. At 1302 hours the flight reported to Calcutta FIC that it was 100 miles out at 8 500 ft. At 1315 hours the flight reported to Calcutta: "83° East at 8 500 ft." No further messages were received from the flight, and attempts by ground stations to re-establish radio contact were unsuccessful. On 2 August search and rescue operations were instituted and on 9 August the wreckage of the aircraft was located on a mountain top at an altitude of 11 200 ft.

1.2 Damage to aircraft

The aircraft was destroyed.

1.3 Injuries to persons

All occupants, i. e. 4 crew and 6 passengers, were killed.

2. Facts ascertained by the Inquiry

2. l Aircraft information

The Certificate of Airworthiness was valid until 11 April 1963. A Certificate of Maintenance valid for a period of 24 hours was issued at 1100 hours local time on 1 August 1962. The aircraft had flown 1 hour 15 minutes since the last periodic check.

The weight of the aircraft and the location of the centre of gravity were within limits.

The engine times since overhaul were: No. 1 engine 788 hours 05 minutes, No. 2 engine 704 hours 25 minutes.

The log books and maintenance records were well-kept and satisfactory.

^{*} All times in this report are Nepal time.

2.2 Crew information

The pilot-in-command, age 54 years, held a valid senior commercial pilot's licence endorsed for DC-3 aircraft and a current instrument rating. He had a total of 29 709 hours flying of which more than 10 000 hours were on DC-3 aircraft. He had completed 221 hours 45 minutes flying in the preceding 90 days.

The co-pilot, age 28 years, held a valid commercial pilot's licence endorsed for DC-3 aircraft. He had a total of 772 hours of which 422 hours 10 minutes were on DC-3 aircraft. He had completed 106 hours 55 minutes in the preceding 90 days.

The flight radio officer held a valid flight radio officer's licence. He had a total of 1 373 hours 05 minutes flying experience all on DC-3 aircraft.

2.3 Weather information

No weather forecast was available before the flight took off from Gaucher Airport. However, a report received after the accident indicated severe monsoon weather over the region with severe turbulence in cloud.

2.4 Navigational aids

Non-directional MF radio beacons. The aircraft was fitted with an ADF receiver.

2.5 Communications

Radio communications were normal up to the time of the accident.

2.6 Aerodrome installations

N/A.

2.7 Fire

Fire did not occur.

2.8 Wreckage

The aircraft was apparently in a horizontal attitude with the undercarriage and flaps retracted at the time of collision with the ground. Both wings were sheared off at the time of impact with the trees, and the engines were severed from the wings and deeply buried in the ground. The propellers were apparently in high rpm at the time of impact. The cockpit had sheared from the fuselage and was found badly crushed 100 ft ahead of the wings. The remainder of the fuselage was in an inverted position and badly damaged.

3. Comments, findings and recommendations

3. 1 Discussion of the evidence and conclusions

The Investigation Committee, on the strength of limited evidence available, concluded that the cause of the accident was the aircraft's collision with a mountain top at an altitude of 11 200 ft. The collision probably resulted from the fact that the aircraft had drifted off course while flying under instrument meteorological conditions and attempting to reach an altitude at which it would be able to resume operation under visual flight rules.

3.2 Probable causes

The probable cause was the drifting of the aircraft to the north of its track, towards high mountainous terrain, under instrument meteorological conditions.

3.3 Recommendations

The Investigation Committee, taking into account the probable cause of the aircraft accident, recommends that the authorities concerned, until such time as adequate communication, navigational and meteorological facilities become available, direct flight operations Kathmandu - New Delhi and other operations as far as applicable, via a pre-determined point, thereby providing route(s) that eliminate operation over high mountainous terrain.

ICAO Ref: AR/788