No. 16

Union des Transports Aériens, Douglas DC-6, F-BHMS, accident at "El Goterón",

Trevelez (Granada), Spain, on 2 October 1964. Report dated 16 February

1965, released by the Sub-Secretariat for Civil Aviation, Spain.

1. - Investigation

1.1 History of the flight

The aircraft was flying a scheduled international passenger flight from Paris to Marseilles, Palma de Mallorca and Port-Etienne. The trip to Palma was uneventful and, following receipt of the latest meteorological information available, the aircraft took off from runway 27 for Port-Etienne at 0314 hours GMT. According to its flight plan the aircraft was to check with the following while en route: area control centres at Barcelona, Seville, Casablanca and Dakar and the control tower at Port-Etienne. At 0339 hours, it advised Palma control tower that it was over Ibiza. It reported to Barcelona FIR that it had crossed the FIR boundary at 0401 hours at flight level 100. At 0353 hours, it reported to Seville FIR that it was estimating the FIR boundary at 0401 at flight level 100 and Los Alcazares at 0415 hours. At 0420 hours, it reported having passed Los Alcazares in clear skies at 0415 hours, estimating abeam Malaga at 0500 hours, overhead Tanger at 0524, and Port-Etienne at 1020 hours. This was the last communication from the flight. Seville FIR tried subsequently, without success, to contact the aircraft. The aircraft hit a mountain at 0445 hours.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	7	73	
Non-fatal			
None			

1.3 Damage to aircraft

The aircraft was completely destroyed.

1.4 Other damage

No objects other than the aircraft were damaged.

1.5 Crew information

The pilot-in-command held an airline transport pilot's licence and a mavigator's licence. He had flown a total of 10 964 hours.

No information was contained in the report concerning the other crew members on the subject flight.

1.6 Aircraft information

The aircraft had a certificate of airworthiness. It had flown a total of 29 620 hours, including 16 119 hours since its last overhaul.

The times on its four engines were as follows:

(H	o	u	r	s)

1.

Total time flown:	24 892	11 698	18 330	19 116
Since last overhaul:	871	922	1 493	695

1.7 Meteorological information

The following are the weather conditions which existed at Granada around the time of the accident:

wind: calm

horizontal visibility: 10 to 15 km, light haze, clear skies

QNH: 1 025.2 mb QFE: 1 017.9 mb

1.8 Aids to navigation

Navigation aids aboard the aircraft and along its route are not mentioned in the report.

1.9 Communications

Communications were normal until 0420 hours. No further message was received from the aircraft after that time.

1.10 Aerodrome and ground facilities

Not pertinent to the accident.

1.11 Flight recorders

The flight recorder was recovered and sent to Paris by the French Board of Inquiry. No further information was forthcoming.*

1.12 Wreckage

The debris were scattered over a wide area of the mountain. The aircraft, its engines and propellers were completely destroyed.

^{*} Secretariat Note: Subsequent enquiries indicate that no information could be obtained.

1.13 Fire

No mention of fire was made in the report.

1.14 Survival aspects

No information was contained in the report.

1.15 Tests and research

No information was contained in the report.

2. - Analysis and Conclusions

2.1 Analysis

No instruments or assemblies were found on which a technical investigation could be based. Possible causes of the accident could, therefore, not be determined.

It is believed that after Los Alcazares (0415 hours), the aircraft headed for Tanger, deviating slightly from the planned route which was 25 km away from the scene of the accident and at altitudes which were within the established safety margin.

The difference between the Los Alcazares - Tanger route and the Los Alcazares - site of the accident route, exceeds 5°. Since the automatic pilot error is plus or minus 1°, the remaining 4° may have been caused by wind or some other undiscovered error.

2.2 Conclusions

Findings

The pilot-in-command held an airline transport pilot's licence and had considerable flying experience.

The aircraft had a certificate of airworthiness.

At the time of last contact with the aircraft it was flying in clear skies.

The aircraft deviated from the flight plan but flew at altitudes within the established safety margin, then struck a mountain. The reason for the deviation from the planned route could not be determined.

<u>Probable cause(s)</u>

The cause of the accident was not determined.

3. - Recommendations

None were contained in the report.

ICAO Ref: AR/862