

No. 24

Swissair, Convair 440, HB-IMD, crashed while approaching to land at Shannon Airport, Ireland, on 15 July 1956. Report released by Department of Industry and Commerce, Dublin, Ireland.

Circumstances

The aircraft departed from San Diego, California, at 0407 hours on 12 July for Zurich Airport, Switzerland, with two American pilots at the controls, on a delivery flight to Swissair. Intermediate stops included New York, Gander and Shannon. Having left New York at 1240 GMT on 14 July 1956, the aircraft landed at Gander at 1659 GMT. After a stop of 57 minutes, it left Gander for Shannon at 1748 GMT carrying the same crew of 4 members. Following an uneventful ocean crossing the aircraft at 0008 hours on 15 July was given initial descent clearance to Shannon and was then cleared into the Shannon Holding Pattern, where four other aircraft were holding. At 0125 hours the aircraft commenced a Ground Controlled Approach to runway 23 and on establishing visual reference to the ground broke off the approach for a left-hand visual circuit to runway 05. During the turn onto final approach to runway 05, the aircraft, while banking steeply was observed to drop. The aircraft was destroyed on impact with the ground at approximately 0135 hours and the 4 occupants were killed. There was no fire.

Investigation and Evidence

The weather conditions at Shannon at the time of the accident were - drizzle; cloud 2/8 at 600 feet and 6/8 at 900 feet; horizontal visibility 10 miles; surface wind 340/11 knots. The conditions experienced by the flight at Shannon were equal to or better than the conditions reported to it.

The aircraft was constructed in June 1956 and received a Certificate of Airworthiness on 10 July 1956. Its total flight time at the time of the accident was about 33 hours.

There was no evidence of any mechanical or structural failure of the aircraft and no operating difficulty was reported by the crew.

All appropriate procedures associated with the flight were carried out in a proper manner by the Ground Services at Shannon Airport.

The procedure adopted by the flight in effecting a visual circuit to runway 05 after establishing visual contact with the ground, following the completion of a Ground Controlled Approach to runway 23, was normal. The turns effected by the aircraft during the visual circuit were steeper than normal. The position on the approach from which a left-turn was commenced to align with runway 05 did not allow sufficient distance for a normal turn onto final approach to runway 05. The visual circuit and turn onto final approach to runway 05 were effected over terrain which, in the conditions prevailing at the time of the accident, provided poor visual reference to the ground plane.

Probable Cause

The probable cause of the accident was an error of judgment by the pilot, resulting in the execution of an abnormally steep turn onto final approach during which the aircraft slipped into the ground.

Possible contributory factors were:-

- a) that for the successful execution of an approach involving a steep turn near the ground on a very dark night, there had been insufficient visual guidance from the terrain;
- b) impairment of the pilots' proficiency due to the length of the period on duty.