

No. 16

IBERIA, Lockheed Super Constellation 1049, EC-AIN, accident at Los Rodeos Airport, Santa Cruz de Tenerife, Canary Islands, on 5 May 1965. Report undated, released by the Undersecretariat of Civil Aviation, Spain

1. - Investigation1.1 History of the flight

Flight 401 was a scheduled domestic flight between Madrid, Spain and Santa Cruz de Tenerife, Canary Islands. At 2053 hours the aircraft was cleared for approach to runway 30 at the Santa Cruz de Tenerife/Los Rodeos Airport. At this time it was informed by the approach controller that the airport was below meteorological minima and that the following weather conditions prevailed:

Wind: 330/variable 10 to 12 kt, gust to 14 kt
Visibility: 100 to 500 m, reduced to zero over the runway by a bar of stratus
Present weather: distant fog, intermittent fog banks
Clouds: 6/8 stratus from 0 to 30 m
QNH: 30.03 in. of Hg
QFE: 942.9 mb
Temperature: 14°
Dew-point: 14°.

This was acknowledged by the flight. The pilot, who saw the beginning of runway 30 clearly but not the rest of it, decided to make a very low run after which he re-applied power for a go-around at 2106 hours. He circled the aerodrome, apparently intending to land, and at 2115 hours reported on final. At 2117 hours he reported to the tower: "401 pulling up to go around", and this was the last communication received from the aircraft. It was subsequently found that, when starting its go-around, the aircraft struck a scraper and tractor located 50 m from the runway edge, with one leg of the undercarriage and the lower aft part of the fuselage. It left various debris scattered about and finally crashed on the western edge of the diversion canal of the Rodeo gorge. From there, it slid about 100 m across private farmland and finally burst into flames. The accident occurred at 2117 hours.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	6	26	
Non-fatal	2	14	
None			

1.3 Damage to aircraft

The aircraft was destroyed.

1.4 Other damage

There was no other damage.

1.5 Crew information

The pilot-in-command held an airline transport pilot's licence valid until 13 August 1965. He had flown a total of 12 947 hours with Iberia, including 4 110 hours on the subject type of aircraft. He had made 674 landings at Tenerife.

The co-pilot also held an airline transport pilot's licence valid until 19 August 1965. He had flown a total of 7 802 hours with Iberia, including 350 hours on the subject type of aircraft.

The flight engineer held a flight engineer's licence valid until 24 November 1965. He had flown a total of 9 037 hours with Iberia, including 4 584 hours on the subject type of aircraft.

The radiotelegraphist held a radiotelegraphist's licence valid until 12 May 1965. He had flown a total of 7 241 hours with Iberia, including 1 060 hours on the subject type of aircraft.

The other crew members aboard were a pilot-in-training, a hostess, and two stewards.

1.6 Aircraft information

The aircraft's certificate of airworthiness was valid until 17 August 1965.

At the time of the accident the aircraft's gross weight was within the permissible limits.

The type of fuel being used was not stated in the report.

1.7 Meteorological information

The weather conditions were as follows:

AERO 2100 hours:

Wind: 210°/12 kt

Visibility: 2 km

Cloud cover: 6/8 stratus from 0 to 30 m

Pressure: 1 017 mb

Temperature: 14°

Dew-point: 14°

Present weather: distant fog

AERO 2130 hours:

Wind: 300°/10 kt
Visibility: less than 100 m
Cloud cover: 8/8 stratus 0 m
Pressure: 1 017 mb
Temperature: 14°
Dew-point: 14°
Present weather: fog

1.8 Aids to navigation

Los Rodeos Airport has a radio beacon (frequency 370 kc/s) and a marker beacon (frequency 262 kc/s).

1.9 Communication

The aircraft was in contact with the control tower at Tenerife up to the time of the accident. There was no indication of any difficulty in the messages exchanged.

1.10 Aerodrome and ground facilities

The first 200 m of runway 30 were out of service at the time of the accident and the runway lighting was at its maximum brightness.

1.11 Flight recorders

Not mentioned in the report.

1.12 Wreckage

The first impact with the scraper was made by the landing gear, and one wheel was thrown about 500 m away. After this the aft part of the fuselage collided with the machine and the two aft well doors became detached and fell between the tractor and scraper on the ground. At the time of first impact the aircraft was at a height of about 2 m above the ground. It made contact with the ground about 300 m farther, ahead of the drainage canal, after crossing the road. Over these 300 m the aircraft left a trail of wreckage, equipment, tubing etc., indicating its path.

1.13 Fire

The aircraft caught fire so violently that the airport fire-fighting equipment was unable to extinguish it.

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

Evidence revealed that, although the prevailing weather conditions at Los Rodeos airport were below the authorized minima, the pilot-in-command elected to land there instead of proceeding to Las Palmas. He made a first attempt at 2100 hours but was unable to land. During his second attempt at 2115 hours he sighted a clear sector, 200 m to 300 m long, at the beginning of runway 30. However, he was unable to land in this sector probably because of excessive speed. He then entered fog or low clouds and re-applied power to go around again. He then strayed to the left of the runway and struck the upper part of a motor-scraper, which was working on the left side of runway 30 approximately 50 m from the runway edge. The state of the aircraft and observations of the fuselage, tail plane, engines and landing gear which were scattered over a long, narrow strip, indicated that the aircraft was flying in a level attitude and that the approach was executed at a low altitude.

2.2 Conclusions

Findings

The crew were properly certificated.

The aircraft had a valid certificate of airworthiness and its gross weight was within the permissible limits.

The meteorological conditions existing at Los Rodeos Airport were below the authorized minima. However, the pilot-in-command decided to land there instead of proceeding to Las Palmas.

He made two attempts to land but was unsuccessful. On the second attempt he was prevented by excess speed from landing in a clear sector of the runway, then re-entered cloud or fog and strayed unaware to the left of the runway where a tractor and scraper were located. The aircraft then collided with the vehicles which were about 110 m from the runway centre line.

Cause or Probable cause(s)

The pilot-in-command should have proceeded to Las Palmas in view of the adverse weather conditions prevailing at the airport, which he should have appreciated during his first fly-past. His partial view of the airport and the glow of the lights must have induced him to make a new attempt with the consequences described above.

3. - Recommendations

None were contained in the report.