

No. 7Pakistan International Airlines Corporation, Fokker Friendship, AP-ATT accident between Rawalpindi and Skardu on 8 October 1965. Report dated 19 October 1965 released by the Director General of Civil Aviation, Pakistan1. - Investigation1.1 History of the flight

The aircraft took off from Rawalpindi at 0101 hours GMT on a domestic flight to Skardu carrying 9 146 lb of food supplies. At 0104 hours it called Cherat Homer stating that it was due at control zone boundary at 0110 hours. According to the Chaklala ATC log the aircraft called Skardu at 0107 hours on 119.7 but there was no response from Skardu on this frequency. According to the Skardu log: Skardu asked Gilgit at 0120 hours to listen out for the aircraft and advise it to change over to 5514 kcs. The aircraft called Skardu at 0130 hours on 5514 Kc. There was no further communication with the aircraft. It was subsequently found that the aircraft had struck the northern side of a ridge at an elevation of 13 100 ft just inside Pakistan territory near the Pakistan-Azad Kashmir border. The co-ordinates of the site of the accident were 34°42'N - 73°40'E.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	4		
Non-fatal			
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, aged 31, held an airline transport pilot's licence valid until 25 January 1966. He had flown a total of 5 640 hours including 3 510 hours on the Fokker Friendship and 317 hours within the last 90 days.

The co-pilot, aged 27, held a commercial pilot's licence which was valid until 14 April 1966. He had flown a total of 865 hours including 30 on the subject type of aircraft and 182 hours within the last 90 days.

There were also two supernumerary pilots aboard. The first, aged 26, had a commercial pilot's licence valid until 28 December 1966 and had flown a total of 636 hours including 376 hours on the Fokker Friendship and 123 hours during the last 90 days. The other, aged 32, held an airline transport pilot's licence valid until 19 January 1966 and had flown 3 502 hours including 6 hours on the subject type of aircraft and 142 hours within the last 90 days.

#### 1.6 Aircraft information

The aircraft's certificate of airworthiness was not mentioned in the report.

According to the load and trim sheets there was no evidence of overloading or poor trim.

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

#### 1.7 Meteorological information

At the time of the flight the weather was clear and en route visibility was 4 - 8 NM. Clouds were 2/8 to 3/8 altocumulus (base 15 000 ft) and the wind was 10/15 kt from 290/310<sup>0</sup>. No icing was forecast.

#### 1.8 Aids to navigation

Not mentioned in the report.

#### 1.9 Communications

No communication difficulties were reported until 0130 hours when the aircraft was last heard from.

#### 1.10 Aerodrome and ground facilities

Not pertinent to the accident.

#### 1.11 Flight recorders

Not mentioned in the report.

#### 1.12 Wreckage

The wreckage was located at a point 2 to 3 miles inside the Pakistan/Azad Kashmir border about 8 miles northwest of Patian in Azad Kashmir. The aircraft had hit the northern part of a ridge at an elevation of 13 100 ft leaving the outer portion of both port and starboard wings at the ridge. The rest of the aircraft slid down to a level of 11 800 ft along the slope in a left hand curve gradually disintegrating.

### 1.13 Fire

Fire in the area of the left engine fire wall and in the right wing at the point where the outer wing had torn off occurred after impact. There was no evidence of any fire in the main cabin or in either engine.

### 1.14 Survival aspects

This was a non-survivable accident.

### 1.15 Tests and research

No information was contained in the report.

## 2. - Analysis and Conclusions

### 2.1 Analysis

The aircraft had completely disintegrated after initial impact.

Technical examination of the wreckage revealed that both engines were under power at the time of impact.

The port engine had come off its mountings and disintegrated into several parts. The starboard engine was still attached to the starboard wing and the forward bending of the two lower blades of the starboard propeller indicated that the starboard engine was under power at the time of impact as indicated from the heavy scoring noticed in the turbine section and the damage to the turbine blades.

The examination of the instrument panel indicated a height of 11 800 ft at standard altimeter setting and the climb indicator showed a rate of climb of 500 ft at 140 kt IAS.

The technical investigation of the wreckage did not reveal any evidence of airframe failure.

There were no indications that the aircraft had been shot at from the ground or attacked in the air. There were no enemy aircraft in the vicinity at the time of the accident.

Three eye witnesses mentioned having seeing smoke from the aircraft. Had there been fire in any part of the aircraft or its engines prior to impact there would definitely have been tell-tale marks to that effect. On the body of the aircraft the fire would have travelled in a rearward direction with the slip stream and in the case of the engines there would have been heat effect markings (blueing) internally.

No evidence of an in-flight fire was found.

The weather was perfectly clear and could not have been a factor in this accident. Although down-draughts are known to exist in mountainous areas it was considered unlikely that it could be the cause of the accident, firstly because the accident occurred in the early hours of the morning where down-draughts are more unlikely and secondly because no evidence was found of any other aircraft having encountered down-draughts in that area on that day.

Standard climb procedure for F 27 aircraft is to start climbing at a rate of 1 000 ft/min at 160 kt IAS, tapering off to 500 ft/min at 140 kt until reaching the specified cruising altitude of 20 000 ft. It would appear that the pilot did not use this procedure, otherwise he would have been at least at an altitude of 16 000 ft, which is normally reached at point X, 20 NM before the site of the accident.

The aircraft appeared to have hit the ridge in a steep climb attitude, slightly banked to port as evidenced by the fact that:

- the bottom of the tail cone was bashed;
- the bottom of the port engine nacelle was knocked in;
- the rear half of the fuselage was torn up along the port bottom side;
- the port engine was torn off from the port wing although the starboard engine was still attached to the starboard wing;
- the port propeller was torn off from the engine.

No reason was found to explain why the pilot was unable to clear the ridge either by flying at a greater altitude or by making a turn towards lower obstructions on either side of the ridge.

## 2.2 Conclusions

### Findings

The crew were properly certificated.

The aircraft's certificate of airworthiness was not mentioned in the report.

The weather was clear and was not a contributing factor.

There was no malfunctioning of the engines or failure of any part of the airframe.

There was no fire in flight.

The aircraft appeared to have hit the ridge in a steep climb attitude, slightly banked to port.

The left-handed curved wreckage trail indicated that after the port engine came off, the right engine which was still under power carried the aircraft forward in a left-handed curve.

No reason was found to explain why the pilot was unable to clear the ridge.

Cause or  
Probable cause(s)

The cause of the accident was undetermined.

3. - Recommendations

None were contained in the report.

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