

No. 16

Globeair A.G., Britannia 313, HB-ITB, accident near Nicosia Airport, Cyprus, on 19 April 1967. Report dated 24 June 1968, released by the Department of Civil Aviation, Ministry of Communications and Works, Nicosia

1.- Investigation1.1 History of the Flight

The aircraft was on a non-scheduled flight from Bangkok to Basel with scheduled stops at Colombo, Bombay and Cairo. The aircraft departed Bombay for Cairo on 19 April at 1312 hours GMT, with 11 hours and 10 minutes of fuel endurance and an estimated flight time for Cairo of 9 hours. According to the flight plan time, it was due to arrive in Cairo at 2212 hours. The alternate airport for the above sector was given as Beirut.

At 2215 hours the aircraft was heard calling Nicosia but, due to distance and height, two-way communication with Nicosia on VHF could not be established until 2234 hours.

In the meantime a message was received from Beirut advising Nicosia that the aircraft had entered the Nicosia FIR and had reported over position Red 18A at 2229 hours.

From the Area Control radiotelephony tape recording, it is evident that the actual weather conditions at Nicosia at 2145 hours and 2245 hours were passed to the aircraft at 2238 hours and 2254 hours respectively. Details of the latter actual weather were passed again to the aircraft at 2300 hours by Approach Control.

The aircraft came over the field at 2306 hours and was cleared for a right-hand circuit. At 2310 hours, when over the threshold of runway 32, the aircraft was slightly high and the captain decided to overshoot. He informed the tower and was cleared for a left-hand circuit. He further informed the tower that he would carry out a low circuit.

The aircraft was momentarily seen by the controller during its final approach and the glare of its landing lights was visible through the low cloud when it made a pass over the runway in use and disappeared from view over the upwind end of the runway in the low cloud to the north-west.

On his second attempt to land and while executing a low circuit, the aircraft collided with the ground at 2313 hours, at position 35°06'31" N 33°17'15" E.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	9	117	
Non-fatal	1	3	
None			

1.3 Damage to aircraft

Destroyed.

1.4 Other damage

The accident occurred in undulating untilled ground. Some damage was done to a small barley field in the vicinity, during the course of the investigation.

1.5 Crew information

Captain M. St. E. Muller, aged 43, was a holder of a valid Swiss airline transport pilot's licence No. 539 with a rating for Bristol Britannia and a current instrument rating. His total flying amounted to 8 285 hours, of which 1 493 were on Britannia aircraft. At the time of the accident he had been on duty for 22 hours and 17 minutes.

Captain H.M. Day, aged 40, was medically fit for his British airline transport pilot's licence without any current aircraft endorsements. His Swiss ALTP with a rating for DC-3 had in the meantime expired. From information received from the Swiss Authorities he failed to pass his instrument rating test and a type rating for Britannia aircraft as late as 7 April 1967. His total flying amounted to 9 680 hours, with only 49 hours 46 minutes on Britannia. At the time of the accident, he had been on duty for 22 hours and 17 minutes.

First Officer P. Hippenmeyer, aged 24, was a holder of a Swiss senior commercial pilot's licence No. 202 with a current instrument rating and endorsed as co-pilot for Britannia aircraft. His total flying amounted to 1 860 hours, of which 785 hours were on Britannia aircraft. At the time of the accident he had been on duty for 22 hours and 17 minutes.

Flight Engineers M.W. Saunders and H.J. Geisen were both holders of valid Swiss flight engineer's licences with ratings for Bristol Britannia aircraft.

1.6 Aircraft information

HB-ITB was built by the Bristol Aircraft Ltd., Filton for El-Al Israel Airlines and delivered to them on 12 September 1957; its original registration was 4X-AGA. The aircraft was sold to Globeair A.G. Basel on 2 April 1964. At the time of the accident the aircraft had completed 20 632 hours flying, with 6 780 landings.

The aircraft had a valid certificate of airworthiness No. 2184/b/1 which was expiring on 19 March 1968. The last valid certificate of maintenance of the check 1 was issued on 17 March 1967.

1.7 Meteorological information

The last weather report passed to the aircraft before the crash at 2300 hours was:

Surface wind:	Calm
Visibility:	9 km
Present weather:	Thunderstorm
Cloud:	5 oktas at 250 ft (measured) 3 oktas cumulonimbus 3 000 ft 5 oktas at 9 000 ft
QNH:	1 006 mb
QFE:	979 mb
Air temperature:	Plus 13°C
Dew-point:	Plus 13°C

The special meteorological observation made on the night of the accident at 2 315 hours (2 minutes after the crash) was:

Surface wind:	1 00°/07 kt
Visibility:	7 km
Present weather:	Thunderstorm
Cloud:	5 oktas 250 ft (measured) 5 oktas cumulonimbus 2 000 ft (estimated)
QNH:	1 004.5 mb 29.66 in
QFE:	978.1 mb 28.88 in
Air Temperature:	Plus 13° C
Dew-point:	Plus 13° C

1.8 Aids to navigation

The following facilities were available;

1. Nicosia VOR
2. Nicosia NDB
3. Nicosia Runway Locator Beacon

1.9 Communications

The aircraft established normal VHF communications with the Nicosia Area Control Centre and Nicosia Approach and Aerodrome Control.

1.10 Aerodrome and ground facilities

Runway 32 at Nicosia with threshold elevation of 221 m (726 ft) has a tarmac surface and is 2 438 m (8 000 ft) long and 48 m (150 ft) wide. At the time of the accident the runway lighting, the threshold lighting and the approach lighting (red of constant intensity) were on and fully serviceable.

1.11 Flight recorders

Not fitted.

1.12 Wreckage

The ground at the scene of the accident was undulating. From the inspection at the scene of the accident, 3 km south of the threshold of runway 32, it was evident that the aircraft struck the ground 6.7 m (22 ft) below the top of a hillock 256.6 m (842 ft) above Mean Sea Level, in level flight on a heading 068° M with 25° of left bank.

The outer section of the port wing remained at the point of impact and the aircraft rolled over with parts of the port wing disintegrating before it struck another hillock, and disintegrated into many parts.

A visual inspection of the engines and propellers gave no reason to suspect any malfunctioning. All four engines were turning at the point of impact.

All the aircraft components were accounted and were strewn on either side of a line heading 068° M for a distance of 230 m.

The largest intact piece was the tail unit (13 m long) which was resting on its starboard side 204 m from the point of impact. The passengers and hostess who survived the crash were found near the tail section of the wreckage.

1.13 Fire

Fires were created at the second point of impact from the fuel of the port wing tanks where the ground was scorched. A more intense fire destroyed the starboard wing which was resting upside down quarter way up the side of the higher hillock which was 266.6 m (875 ft) AMSL.

1.14 Survival aspects

Rescue operations were hampered by weather and terrain as the crash took place at night and during a thunderstorm. The ground in the vicinity of the crash was a complex of little hillocks and gullies. The wreckage was located at 2330 hours by the ground rescue team. The helicopter which had to delay its take-off due to a severe storm over Nicosia airfield made three evacuation flights at 0032 hours, 0056 hours, 0114 hours with survivors to the Austrian Field Hospital of UNFICYP, which was 8 km from the scene of the crash.

1.15 Tests and research

None were carried out.

2.- Analysis and Conclusions

2.1 Analysis

The reason why Captain Muller chose to land at Nicosia instead of Beirut which was on his flight plan and where the weather conditions were much better than Nicosia cannot be determined.

The following are the details of Beirut weather at the respective times:

<u>QAM</u>	<u>2100Z</u>	<u>2200Z</u>	<u>2300Z</u>	<u>2400Z</u>
QAN	ENE 6 kt	NE 10 kt	NE 6 kt	E 4 kt
QBA	20 km	20 km	20 km	20 km
QNY	cloudy	cloudy	partly cloudy	cloudy
QBB	3/8 Cu 800 m	3/8 Cu 800 m	1/8 Cu 800 m	4/8 Cu 800 m

From data available concerning Capt. H.M. Day, it is obvious that he must be considered as a pilot under training in view of his limited hours on Britannias and as neither his Swiss nor his British licence was valid.

Under these conditions the flight time limitations for two pilots for turbo-prop aircraft had been exceeded by 2 hours and 47 minutes at the time of the accident. Furthermore this excess would be augmented to 4 hours and 17 minutes, taking into consideration the fact that the company considered the 1½ hour preceding the scheduled take-off time on duty for flight time limitation purposes.

From the tape recordings it has been possible to establish, with the help of Globeair technical personnel who could recognize the speech recorded, the fact that during the flight of HB-ITB from Cairo to Nicosia, Capt. Muller and F/O Hippenmeyer were in the flight deck.

From the data made available it can be said that the aircraft was airworthy and properly maintained and correctly loaded in Bombay for the flight.

No evidence of pre-crash failure was discovered and the radiotelephony contact with the tower from initial contact and up to the time of the crash was normal.

After overshoot procedures the pilot decided to make a visual low circuit.

The company's weather minima for circling at Nicosia are given as 1 000 ft cloud base and 4 km visibility. Using the Nicosia NDB for runway 27, the minima are 500 ft cloud base and 2.4 km visibility.

2.2 Cause or Probable cause(s)

The accident resulted from an attempt to make an approach at a height too low to clear rising ground.

N.B. All times given in the report are GMT.

3.- Recommendations

None were contained in the report.