

ROMANIA
MINISTRY OF TRANSPORT
DEPARTMENT OF CIVIL AVIATION
Air Accident Investigation Branch

FINAL REPORT

I. GENERAL DATA:

Name of the Owner: TRAVAIR – NV (Belgium)

Name of the Operator: TRAVAIR – NV (Belgium)

Name of the Manufacturer: BEECH AIRCRAFT CORPORATION

Aircraft Type: BEEHCRAFT – 100 A

Manufacturer Serial No.: B 188

Place and Date of the Manufacturer: Whicita (U.S.A)/December 21st, 1973

No. & Type of Engines: 2 x P & PT6A-28

Type of Propellers: HARTZELL HCB 4TN-3A/T 10173FB-12,5

Maximum Weight: 5247 Kg

Aircraft Registration: 00-TLS

Place and Date of the Accident: Bacău Airport-Romania / January 8th, 1994, 09.30 hrs UTC

Type of Flight: private (corporate)

Persons on Board: crew (2) passengers (8)

Accident Investigation Authority: Department of Civil Aviation Romania

II. History of the flight

The aircraft BEEHCRAFT-100A, registered 00-TLS, owned by TRAVAIR-NV (Belgium) took off Oradea Airport-Romania on January 8, 1994, at 08.05 hrs. L.T. with destination Iași Airport-Romania, having as alternative airport Bacău Airport-Romania.

At 08.53 hrs, due to bad meteorological conditions on Iași Airport the crew requested to Bacău-ACC permission for landing on Bacău Airport. Bacău-ACC has

granted permission and informed the crew about the meteorological conditions in that moment at Bacău Airport. The crew confirmed.

During the aircraft was performing the approach procedure, the crew was instructed to contact the precision radar (PAR) and was informed that at that moment the visibility range was 800 m. At the first approach PAR sent to the crew all the appropriate data for the radar assistance and in the final stage has asked the crew to perform a missed landing, go up to 900 m and to contact Bacău-TWR because the aircraft was away from the runway centerline (aprox. 60 m left).

On Bacău TWR frequency the crew received the indication to perform a right turn to intercept the QDM 342 degrees at Bacău. It was also stated that the runway beacon is running. The crew was instructed, also, to contact PAR which assisted the aircraft, with the necessary corrections, during the approach procedure and landing until the crew reported the accident at 9.30 hrs L.T.

An Investigation Commission has been established by the Department Of Civil Aviation who had immediately started its activity.

III. Information regarding the crew

The crew has the necessary qualification and experience for performing this flight mission and met all the conditions requested by the international regulations, including medical conditions.

IV. Information regarding the air traffic personnel

The personnel who performed the air traffic control for the aircraft has the qualification and experience requested by international regulations. The assistance provided to the crew was correct and complete.

V. Meteorological conditions

On January 8th, 1994 the meteorological conditions on Iași-Airport, destination airport, were as follows :

- low visibility (aprox. 100m), frequent fog.

In these conditions the crew was determined to ask permission for landing on Bacău Airport where the meteorological conditions were better. At 08:15 hrs on Bacău Airport the weather was foggy and the visibility 800m.

VI. Data regarding NAVAIDS

At the moment of the accident the Nav aids were running normally, providing all the information both to the crew and to the air traffic personnel.

The assistance requested by the crew was promptly and correctly provided by the air traffic personnel. The runway beacon was also running.

VII. Data regarding air traffic assistance for the aircraft

The control of the flight by Bacău ACC, TWR and PAR was performed according to international aeronautical regulations, the aircraft being assisted by precision radar up to 1km from the threshold.

VIII. Data regarding the damages on the aircraft

The aircraft has landed at 09:30 hrs aprox. 50m away from the threshold of the concrete runway.

From the findings of the Investigation Commission it resulted the following:

- the first touch-down with the runway was made with the nose wheel and then with the main wheels (due to the impact, the nose wheel was damaged).

- after this first impact the aircraft flew for another 7m and then the second touch-down with the runway was made with the main wheels and the propellers (because of the damage of the nose wheel) and went with engines running for about 168 m, has deviated to the right, getting out of the runway, went another 225 m, came back on the runway and stopped after another 20 m.

At the second touch-down the propellers and the radome were damaged

IX. Data about flight data recorders

The aircraft was not provided with its own flight data recorder on cockpit voice recorder. All the conversations between the aircraft and the Romanian Air Traffic Services had been registered by recording equipments of the air traffic units. The copies in the English and Romanian of those conversations are attached to the investigation

file and had been sent by fax to the Civil Aviation Authority of Belgium on January 20th, 1994.

X. Final Remarks and Conclusions

Further the analysis of the flight recordings between the aircraft and the Romanian Air Traffic Services, statements and all other data contained by the investigation file the following conclusions have been reached:

- the meteorological conditions at Iași Airport were difficult and have not permitted the landing of the aircraft
- the decision for landing on Bacău Airport was made by the crew;
- at the moment the meteorological conditions at Bacău Airport assured the minimum conditions for landing the aircraft
- the air traffic control was performed by Bacău TWR and PAR, according to international regulations, providing permanent information regarding the aircraft during the final approach for landing.

We mention that after the first missed landing the crew maintained its decision to perform a second approach for landing, knowing the meteorological conditions on Bacău Airport.

XI. Recommendation

TRAVAIR – NV, the operator of the aircraft, needs to analyze the opportunity to modify the company operational meteorological limits for landing in such cases when the modification speed of the visibility is higher than an imposed value and to correlate, by computation formula and/or procedure, this imposed value with the flight time to the alternative airport.