



**MINISTRY OF TRANSPORT, POSTS AND
TELECOMMUNICATIONS
OF THE SLOVAK REPUBLIC**

Air Accident and Incident Investigation Board
Nám. slobody 6, P.O. BOX 100, 810 05 Bratislava 15

Reg. No: SKA2010003

FINAL REPORT

on air accident investigation
of aircraft **CESSNA 172 SP**
registration: **OM-AGT**

Date: 25.04.2010

Place: LZTR

A. INTRODUCTION

The investigation of an air accident [AA], serious incident [SI], has been conducted pursuant to Art. 18 of the Act No 143/1998 on Civil Aviation (Civil Aviation Act) and on Amendment of Certain Acts.

The final report is issued in accordance with the Regulation L 13 that is the application of the provisions of ANNEX 13 Air accident and Incident Investigation to the Convention on International Civil Aviation and with the Council Directive 94/56/EC, establishing the fundamental principles governing the investigation of civil aviation accidents and incidents.

The exclusive aim of investigation is to establish causes of an accident or serious incident and prevent their occurrence, but not to refer to any fault or liability of persons.

This final report, its individual parts or other documents related to the investigation of the air accident have informative character and can only be used as recommendation for the implementation of measures to prevent occurrence of other air accidents and serious incidents with similar causes.

Operator / Owner:	AIR CARPATIA, s.r.o. / OBERBANK LEASING, s.r.o.
Type of aircraft:	CESSNA 172 SP
Registration:	OM-AGT
Place of take-off:	LZTR
Place of landing:	LZTR
Flight phase:	landing
Date and time of accident:	25.04.2010, 13:38 hrs

Note: All times in this Report are UTC.

B. INFORMATIVE SUMMARY

On 25 April 2010 the crew with rented aircraft with registration No OM-AGT accomplished a task consisting in the navigation flight from the airport Boleráz/LZTR and back.

After landing, in the phase of touchdown of the aircraft on the airport LZTR, the aircraft bounced and landed hard on the grass take-off and landing runway ("runway") on three wheels at once.

The aircraft crew was not injured.

The following person was appointed as investigator of the air accident:

Ing. BENEK Igor

The report is issued by:

Air Accident and Incident Investigation Board
of the Ministry of Transport, Posts and Telecommunications of the Slovak Republic

C. MAIN PART OF REPORT

1. FACTUAL INFORMATION
2. ANALYSES
3. CONCLUSIONS
4. SAFETY RECOMMENDATIONS

1. FACTUAL INFORMATION

1.1 History of the flight

On 25 April 2010 the crew with rented aircraft with registration No OM-AGT accomplished a task consisting in the navigation flight from the airport Boleráz/LZTR and back.

During landing after the navigation flight, in the phase of touchdown of the aircraft at the airport LZTR, the pilot landed at a higher landing speed. In the contact with the runway the aircraft landed on the main landing gear, but the undulated runway caused that the aircraft took off again and then landed hard on three wheels at once. After new landing the aircraft bounced three times and left the runway. The pilot managed to slow down the aircraft by braking and taxied it in front of the airport hangar.

The maintenance engineer inspected the front part of the aircraft and detected damage to the front partition separating the engine compartment from the cabin in the area of attachment of the front landing gear leg.

The aircraft crew was not injured.

Light conditions: Daylight

The operator reported the air accident to the Air Accident and Incident Investigation Board of the Ministry of Transport, Posts and Telecommunications of the Slovak Republic.

1.2 Injuries to persons

Injury	Crew	Passengers	Other persons
Fatal	-	-	-
Serious	-	-	-
Minor	-	-	-
None	2	-	-

1.3 Damage to aircraft

The aircraft was minor damaged in the air accident.

1.4 Other damages

No other damages were reported to the Air Accident and Incident Investigation Board of the Ministry of Transport, Posts and Telecommunications of SR.

1.5 Personnel information

Pilot of aircraft:

Citizen of Slovak Republic, aged 37, holder of the licence of aviation staff – private pilot / PPL(A), No: SK 02080205, issued by the Civil Aviation Authority of SR on 6 July 2009.

Qualifications:

SEP(L) with marked validity until 30 November 2010

Medical certificate of 2nd class with validity until 5 February 2012

Flying experience:

Total flying hours and flights: 141:35 hrs and 370 flights

Flying time of which for the previous 90 days: 5:06 hrs and 9 flights

Flying time of which were on type CESSNA 2:12 hrs and 2 flights

Flying time on the day of accident

(including the critical flight): 1:43 hrs and 1 flight

1.6 Aircraft information

a) Airframe

Type: CESSNA 172 SP,

registration No: OM-AGT

Serial No: 172S9836

Year of manufacture: 2005

Manufacturer: CESSNA AIRCRAFT COMPANY, WICHITA, USA

Total flying hours from the year of manufacture: 1540:49 hrs and 2252 flights

Certificate of airworthiness No: 0872, issued by the Civil Aviation Authority of SR on 13 May 2009

b) Engine

Type: LYCOMING IO-360L2a,

Serial No: L-31924-51A

Manufacturer: TEXTRON Lycoming, USA

Date of incorporation in the aircraft: 27.05.2005

Total operating hours: 1540:49 hrs

c) Propeller

Type: McCAULEY, Serial No: 1A170E/JHA7660

Manufacturer: McCauley Propeller Systems, Wichita, USA

Date of incorporation in the aircraft: 13.09.2007

Total operating hours: 659:25 hrs

d) Weight of aircraft at the time of air accident:

The aircraft weight at the time of accident was within the permitted range.

1.7 Meteorological information

Not applicable.

1.8 Aids to navigation

The aircraft was equipped for VFR flights.

1.9 Communications

The aircraft was equipped by a radiocommunication system suitable for VFR flights.

1.10 Aerodrome information

The airport LZTR was suitable for take-offs and landings of this aircraft type.

1.11 Flight recorders and other recording systems

The aircraft was not equipped by these recorders and systems.

1.12 Wreckage and impact information

The air accident was documented at LZTR and photo documentation was elaborated.

1.13 Medical and pathological information

Not applicable.

1.14 Fire

Not applicable.

1.15 Survival aspects

No search and rescue were required.

1.16 Tests and research

Not applicable.

1.17 Organizational and management information

The air operations were performed in accordance with flight rules valid in the territory of the Slovak Republic.

1.18 Additional information

Not applicable.

1.19 Useful or effective investigation techniques

Standard investigation methods were used.

2. ANALYSIS

2.1 At the time of landing at the airport LZTR, in the phase of touchdown, the pilot of the aircraft was landing at a higher landing speed. At the time of touchdown of the aircraft on the runway the undulated ground of the airport caused a bounce and new take-off of the aircraft, which the pilot tried to correct by pressing the manual steering and to repeat the touchdown manoeuvre.

The pilot reacted to the situation inadequately, due to which the aircraft landed hard on three wheels, so that the loading of the front landing gear leg increased, and it happened again three times. The subsequent inspection by the maintenance engineer detected damage to the front partition separating the engine compartment from the cabin in the area of attachment of the front landing gear leg.

2.2 Nobody was injured in this air accident.

2.3 The aircraft was minor damaged in the air accident.

2.5 The pilot had valid qualifications for this flight.

2.6 Before the critical flight the aircraft fulfilled the conditions of airworthiness.

3. CONCLUSIONS / Cause of air accident

- bounce of the aircraft at the airport LZTR, followed by harder landing on the front landing gear leg and its subsequent damage

- incorrect preparation for landing with a higher landing speed and poor mastering of pilotage technique by the pilot when the aircraft bounced and left the runway.

4. SAFETY RECOMMENDATIONS

The final report from investigation of the air accident does not contain any recommendations.

Bratislava, 28 July 2010