

# MINISTRY OF TRANSPORT, CONSTRUCTION AND REGIONAL DEVELOPMENT OF THE SLOVAK REPUBLIC

Aviation and Maritime Investigation Authority Nám. slobody 6, P.O. BOX 100, 810 05 Bratislava 15

Reg. No.: SKA2011011

## FINAL REPORT

on investigation of air accident of aircraft type **CESSNA 150 L** registration No. **SP-KDN** 

Date: 20.08.2011

Place: Airpoft Kamenica nad Cirochou / LZKC

#### A. INTRODUCTION

The investigation of air accident, serious incident, 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 and in accordance with the Regulation (EU) No. 996/2010 of the European Parliament and of the Council on investigation and prevention of civil aviation accidents and incidents, governing the investigation of civil aviation accidents and incidents.

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.

The exclusive aim of investigation is to establish causes of accident, serious incident, and to 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 in question have an 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: Aeroklub Warszawski, Ksiezycowa 1, Lotnisko Babice,

01- 934 Warsaw - Republic of Poland, 00 48 22 834 93

35, camo@aeroklub.waw.pl

Type of aircraft: Cessna 150L Registration number of aircraft: SP-KDN



Take-off site: EPNL – Airport Losošina, Poland

Planned landing site: LZKC – Kamenica nad Cirochou, Slovak Republic

Flight phase: landing Place of accident: LZKC

Date and time of accident: 20.08.2011, 12:25 hrs

Note: All time data in this report are stated in the UTC time.

#### **B. INFORMATIVE SUMMARY**

On 20 August 2011 at 11:00 hrs the pilot started with aircraft from the Airport EPNL in direction of the Airport LZKC. He had submitted the flight plan for the flight. When he landed at the Aiport LZKC, the aircraft came into hard contact with the ground 30 m in front of the grass runway 070° ("RWY"). Due to the hard landing and subsequent movement of the aircraft until the stop on RWY the aircraft was seriously damaged.

The pilot left the cockpit without help of the others, uninjured.

Person appointed for investigation of causes of the accident:

Ing. Zdeno BIELIK

The report is issued by:

Aviation and Maritime Investigation Authority of the Ministry of Transport, Construction and Regional Development 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 20 August 2011 at 11:00 hrs the pilot started with aircraft from the Airport EPNL in direction of the Airport LZKC.

The pilot conducted the landing approach according to information received from the CTAF (Common Traffic Advisory Frequency) operator.

After the completion of the 4th circling turn the pilot started the final approach. Approximately 200 m in front of the RWY threshold he started the flare manoeuvre in an altitude of 20 m. He continued the flare-out until the aircraft first touched the ground some 30 m in front of the RWY threshold.

Immediately after the contact with the ground the aircraft slid along the concrete bridge over the reclamation canal in the clearway and under the influence of intertial forces continued the forward motion on the ground, until it stopped on RWY about 40 m away from its threshold. Before stopping the aircraft bent to the left side, rebounded from the left wing and stopped in the position, leaned on the engine in the landing direction.

The pilot in his statement said that the premature contact of aircraft with the ground in front of the RWY threshold had been caused by wind blast in the point of levelling-off.

The pilot was not injured in the accident and left the aircraft without being helped.

The motorized patrol of the Police in Humenné was called to the place of accident.

The accident was reported to the Aviation and Maritime Investigation Authority of MoTCRD SR by the operator of Aeroklub Kamenica nad Cirochou.

Daytime: day Flight rules: VFR

#### 1.1 Injuries to persons

Injury	Crew	Passengers	Other persons
Fatal	-	-	-
Serious	-	-	-
Minor	-	-	-
None	1	-	

## 1.3 **Damage to aircraft**

### The aircraft suffered the following damages:

front landing-gear leg, both legs of main landing gear, attachment of main landing gear in aircraft body, lower body section in suspension of the attachment of main landing gear on the right and left sides, deformation of skin in the lower body section near the attachments of main landing gear, left wingtip arc, propeller, forced engine cut-off, engine hood in upper and lower sections, engine air.

## 1.4 Other damages

The Aviation and Maritime Investigation Authority was not informed about circumstances with potential application of other claims for compensation of damages towards a third party.

#### 1.5 **Personnel information**

Pilot - Citizen of Poland, aged of 41

holder of the pilot licence PPL(A) No. PL-13819-PPL(A)-11 with marked validity until 30.04.2013, issued by Urzęd Lotnictwa Cywilnego, Warsaw.

Flying experience: 103 h 205 starts

Medical certificate of 2<sup>nd</sup> class No. 9732/10 with marked validity until 19.10.2015.

Certificate of radio telephonist No. L-12674, unlimited validity.

#### 1.6 Aircraft information

#### Airframe:

Type: CESSNA 150 L

Registration No: SP-KDN Serial No.: F15001063

Year of manufacture: 1974

Manufacturer: CESSNA REIMS AVIATION France

Certificate of airworthiness No. DLC/10/378.

Certificate of airworthiness with marked validity until 07.09.2011.

Total time in service since manufacture: 1745 h 00 min

#### **Engine:**

Type: Continental O-200-A

Serial No: 253629SO

Year of manufacture: 1991

Manufacturer: TELEDYNE CONTINENTAL MOTORS

Date of incorporation into aircraft12.06.1997.

Total time in service since manufacture: 5771 h 10 min.

Total time in service since GO: 99 h 40 min.

## 1.7 Meteorological situation

CAVOK, 340/3 m/s, QNH 1020, 23°C.

Meteorological conditions at the place and time of accident had no influence on the flight and did no participate in the occurrence of the air accident.

#### 1.8 Aids to navigation

Not applicable.

#### 1.9 Communications

The aircraft was equipped by radio communication system enabling two-way radio communication at every moment of flight with all air and aircraft stations. The air traffic at the airport LZKC at the time of accident was on a frequency "info Kamenica 122.6 MHz".

#### 1.10 Aerodrome information

LZKC is a non-public domestic aerodrome with grass RWY, with dimensions of  $850\,\mathrm{m}$  x  $50\,\mathrm{m}$ .

At the time of accident it was operable and fit for take-offs and landing of the respective aircraft type.



## 1.11 Flight recorders and other recording systems

Not applicable.

## 1.12 Wreckage and impact information

The aircraft stopped on RWY leaned on the engine in the landing direction, in one piece.

The final position of the aircraft after the accident was documented, including the preparation of photodocumentation.











## 1.13 Medical and pathological information

Not applicable.

#### 1.14 Fire

No fire broke out.

## 1.15 Survival aspects

Research and rescue were not required.

## 1.16 Tests and research

Not applicable.

## 1.17 Organizational and management information

Not applicable.

#### 1.18 Additional information

Immediately after the accident the traffic at the Airport LZKC was interrupted for 1 hour. After documentation of the place of accident the aircraft was pull away to the aircraft shed. The pilot was alcohol-tested with the result 0.00 % of alcohol in blood.

## 1.19 Useful or effective investigation techniques

Standard investigation methods were used.

#### 2. ANALYSIS

## 2.1 Activity of pilot

The pilot making the approach landing incorrectly assessed the glideslope and during the descent manoeuvre did not react to the low altitude and large distance from the RWY threshold. Due to the premature start of flare-out approximately 200 m in front of the RWY threshold the aircraft was losing speed and then also height. The pilot did not react which ended by hard landing 30 m in front of the RWY threshold. The aircraft got damaged when it came into contact with concrete bridge over the reclamation canal in the RWY clearway.

## 3. CONCLUSIONS/ CAUSE OF AIR ACCIDENT

#### 3.1 Findings

- the pilot had valid qualifications for making the critical flight,
- the aircraft has a valid documentation and did not show any faults before the air accident,
- the aircraft fulfilled the conditions of airworthiness before the critical flight,
- the aircraft was seriously damaged in the air accident,
- nobody was injured in this accident.

#### 3.2 Causes of air accident:

- poor mastering of pilotage in the landing manoeuvre which could have been caused by the low experience of the pilot
- the pilot had incorrectly assessed the point of levelling off and did not correct his error in the final approach phase.

#### 4. FLIGHT SAFETY RECOMMENDATIONS

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

Bratislava, 04.11.2011