



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



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

Reg. No.: SKA2012020

## FINAL REPORT

on investigation of air accident  
of helicopter **Robinson R22**  
Registration No. **OM - BRH**

Date: 08.10.2012

Place: Airport Spišská Nová Ves / LZSV

## 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.

Type of helicopter: Robinson R22  
Registration No.: OM-BRH



Operator: LCP, s.r.o.  
Take-off / landing site: LZSV  
Flight phase: air-taxiing  
Type of operation: general aviation  
Date / time: 08.10.2012, 13:30  
Place of air accident: LZSV

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

## **B. INFORMATIVE SUMMARY**

On 8 October 2012 the pilot with helicopter Robinson R22 was doing air operations in the district of Airport LZSV. After their termination, during air-taxiing, the helicopter grazed the grass airport surface with its right and then left skid and rotor blades. The tail rotor mast came off and the main rotor was destroyed.

The pilot was not injured in the air accident.

The helicopter was destroyed in the accident.

The pilot reported the air accident to the District Police Department of SR in Spišská Nová Ves and to the Aviation and Maritime Investigation Authority of the Ministry of Transport, Construction and Regional Development of SR.

The following persons were appointed for investigation of the air accident:

PaedDr. Ján Mikuš – chairman of the Investigation Board  
Ing. Igor Benek – member of the Investigation Board

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 8 October 2012 the pilot completed the preflight briefing, focusing on improving of the helicopter flying technique in the climbing/descending flight and turning regime. At 12:50 the pilot took off from the grass runway 30 (hereinafter, „RWY“) and started to practice these flight regimes in the area south of the airport. At 13:25 he terminated the operations in this area and made an approach manoeuvre for landing on RWY. After landing he turned some 200 m right from the axis of RWY. Having turned the helicopter in the direction of 120°, the pilot air taxied to the whirl stand at a speed of 20 kt. During the air-taxiing the pilot felt wind gusts coming from the left back of helicopter. The pilot tried to maintain the course and flight attitude when the helicopter lost height. It grazed the grass airport ground with its right skid and fore section. The helicopter started to swing in the longitudinal and transverse direction and to rotate on its vertical axis. The main rotor blades touched the ground and the tail rotor mast came off. The flying wreckage smashed the cockpit canopy. The helicopter came to a standstill on damaged skids with its front section turned in a direction of about 280°.

Daytime: day

Flight rules: VFR



## 1.6 Information about helicopter

### Air frame:

Type: ROBINSON R22  
Registration number: OM-BRH  
Serial No: 0027  
Manufacturer: Robinson Helicopter Company /USA  
Total number of operating hours since manufacture: 9253 h

### Engine:

Type: 0-320-B2C  
Serial No: L-16136-39A  
Manufacturer: Lycomnig Engine /USA

The certificate of airworthiness No. 1089/01 issued by the Civil Aviation Authority of SR on 16 March 2012. The helicopter was released for operation by the authorized organization Aeroslovakia a.s. Nitra (authorization No. SK.MG.016), valid until 23.03.2013.

## 1.7 Meteorological situation

Semi-cloudiness (4/8 Cu), visibility more than 10 km, wind 5-7 kt from 330°.

## 1.8 Aids to navigation

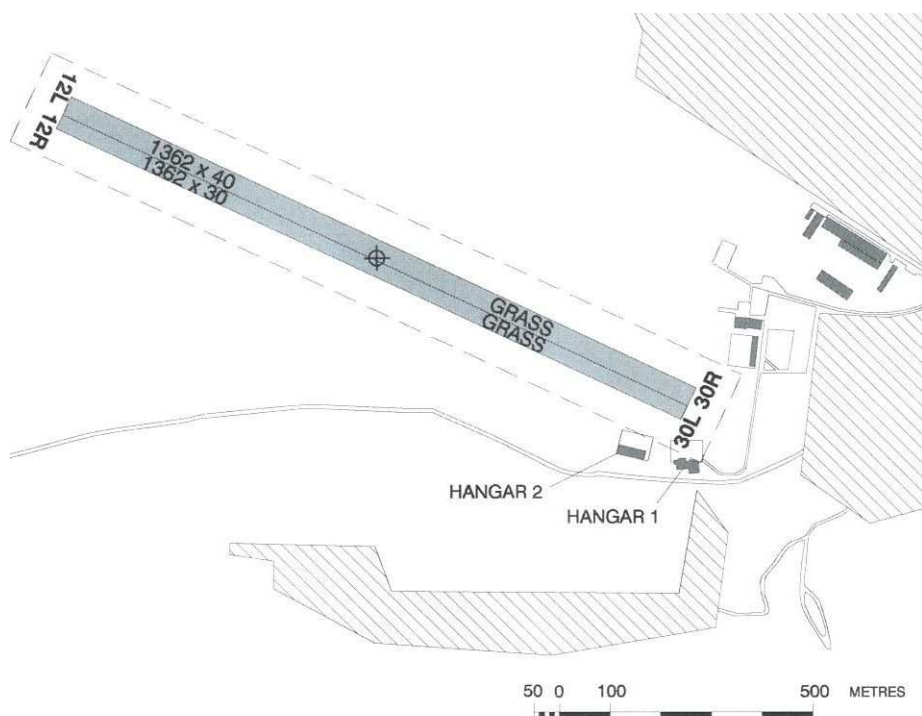
Not applicable.

## 1.9 Communications

The helicopter was equipped by board radio station enabling two-way communication with all air stations at every moment of the flight.

## 1.10 Aerodrome information

The Airport LZSV is a public domestic aerodrome with grass surface of RWY and VFR operation. At the time of air accident it was operable and suitable for take-off and landing of this type of helicopter.



**1.11 Flight recorders and other recording systems**

Not applicable.

**1.12 Wreckage and impact information**

The helicopter came to a standstill on damaged skids in the area of the Airport LZSV.



**1.13 Medical and pathological information**

Not applicable.

**1.14 Fire**

No fire broke out.

**1.15 Survival aspects**

The pilot left the helicopter alone and uninjured.

**1.16 Tests and research**

Not applicable.

**1.17 Organizational and management information**

Not applicable.

**1.18 Additional information**

Not applicable.

**1.19 Useful or effective investigation techniques**

Standard investigation methods were used.

## **2. ANALYSIS**

### **Activity of pilot**

When air taxiing the pilot fully concentrated on the adjustment of direction and inclination, whose changes were caused by wind gusts coming from the left back. He did not pay sufficient attention to the taxiing height, due to which the right skid touched the airport ground, inertial forces increased, destruction processes developed and the pilot lost control of the helicopter. From the accounts of the pilot and the witness it resulted that the pilot caused the accident alone by poor mastering of the helicopter flying technique in the air-taxiing phase.

## **3. CONCLUSIONS / CAUSE OF AIR ACCIDENT**

### **Findings:**

- the pilot had valid qualifications for the critical flight,
- the helicopter had valid documentation and showed no faults before the air accident,
- the meteorological conditions in given place and at given time had not a substantial influence on the flight,
- the helicopter was destroyed in the air accident,
- nobody was injured in the air accident.

### **Causes of air accident:**

- improper division of the pilot's attention during the air-taxiing manoeuvre, which caused that the helicopter lost height and came into contact with the grass surface of the airport.

## **4. SAFETY RECOMMENDATIONS**

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

Bratislava, 15.11.2012