



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.: SKA2012007

FINAL REPORT

on investigation of air accident
of aircraft **Standard Cirrus**
registration No. **OK-8918**

Date: 20.05.2012

Place: 0.6 km east of the community Istebné

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 aircraft:	Standard Cirrus
Registration number:	OK-8918
Operator / Owner:	Attic Club, Czech Republic



Take-off site:	Frýdlant nad Ostravicí Airport / LKFR
Planned landing site:	LKFR
Flight phase:	forced ground landing
Place of accident:	0.6 km east of the community Istebné
Date and time of accident:	20.05.2012, 13 h 01 min

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

B. INFORMATIVE SUMMARY

During forced field landing the aircraft, after contact with uneven ground, the aircraft bounced up and came into contact with the ground, turning by 180°. The aircraft was damaged in this manoeuvre. The pilot and third parties were not injured.

The air accident was reported to the aircraft operator and the AFIS unit in Frýdlant nad Ostravicou. LPS SR, š.p., through its unit RCC reported the accident to the Aviation and Maritime Investigation Authority of MoTCRD SR and to the Police of SR.

Specialized commission appointed for investigation of the air accident:

Marián TURAN – chairman of the Investigation Commission
Ing. Zdeno BIELIK – member of the Investigation Commission

Report 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

The pilot planned to make a thermic flight without flight plan in uncontrolled area of class „G“ FIR Bratislava/LZBB, with take-off from the airport LKFR, to continue the flight to Veľký Choč and return back to the airport of departure. Thermic conditions in the area in front of the city of Dolný Kubín worsened, so the pilot decided to make a forced field landing. After landing on chosen grass surface, due to the uneven ground, the aircraft bounced up and during touchdown its left wing came into contact with the ground. Consequently, the aircraft turned 180° around the vertical axis and was damaged in this movement and resulting impact.

The pilot was not injured. Third parties were not injured and no damage to the property occurred.

Daytime: Day

Flight rules: VFR

1.2 Injuries to persons

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

1.3 Damage to aircraft

When the aircraft bounced off the uneven ground and touched the ground, its wing came into contact with the ground and the aircraft turned around. Due to this movement and hard contact with the ground, the cockpit got damaged and snapped open, and the tail wheel and horizontal rudder got damaged.



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 in command:

Citizen of the Czech Republic, aged of 24 years

Holder of glider pilot licence No. CZ/0010514398, issued by the Civil Aviation Authority of the Czech Republic, with marked validity until 13.10.2019.

Medical certificate of 2nd class, with marked validity until 30.08.2013.

Qualifications: GLD, with marked validity until 31.12.2012

Flying experience:

Total number of flight hours:	150 h 22 min and 209 flights
In it with Std. Cirrus:	49 h 31 min
On the day of air accident:	2 h 05 min and 10 flights

1.6 Aircraft information

Airframe:

Type:	Standard Cirrus
Registration No.:	OK-8918
Serial No:	549
Year of manufacture:	not specified
Manufacturer:	Schempp-Hirth Flugzeugbau GmbH

Total number of operating hours since manufacture: not specified

Certificate of airworthiness No. 4689, issued by the Civil Aviation Authority of the Czech Republic, without time limitation on the condition of verification of airworthiness by legal person in time intervals not longer than 12 months.

The validity of CoA was prolonged until 29.03.2013.

1.7 Meteorological situation

Single snail clouds occurred in the area of air accident. The visibility was above 10 km. According to the pilot's statement, thermic conditions near the city of Dolný Kubín worsened and the aircraft gradually lost height required for continuation of the flight. The pilot therefore decided to make a forced field landing.

1.8 Aids to navigation

Not applicable.

1.9 Communications

The aircraft was equipped by radio communication system enabling a two-way radio communication at every moment of flight with all air stations. During the flight the pilot did not communicate with flight control bodies in FIR LZBB.

1.10 Aerodrome information

Not applicable.

1.11 Flight recorders and other recorders

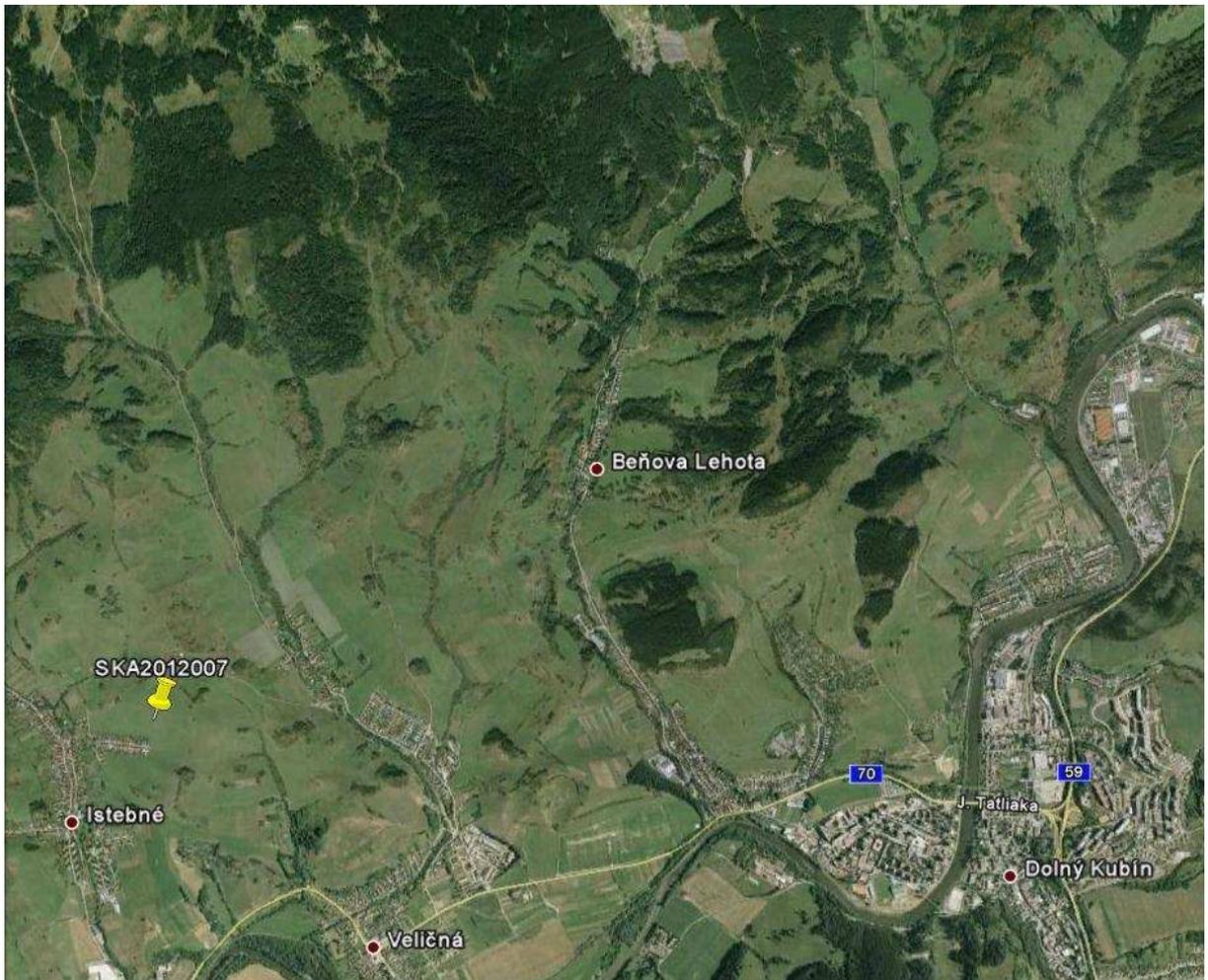
Not applicable.

1.12 Wreckage and impact information

The place of accident is an area with size of 600x150 m, situated 0.6 km east of the community of Istebné, oriented to an easy slope with slightly undulated ground. The surface of the area is formed by a meadow covered by 20-30 cm high grass.

The final position of the aircraft after the accident was documented and photodocumentation was made.

The place of accident is delimited by coordinates: 49°13'01,53''N 19°13'40,88''.



1.13 Medical and pathological information

Not applicable.

1.14 Fire

Not applicable.

1.15 Survival aspects

Research and rescue operations were not required.

1.16 Tests and research

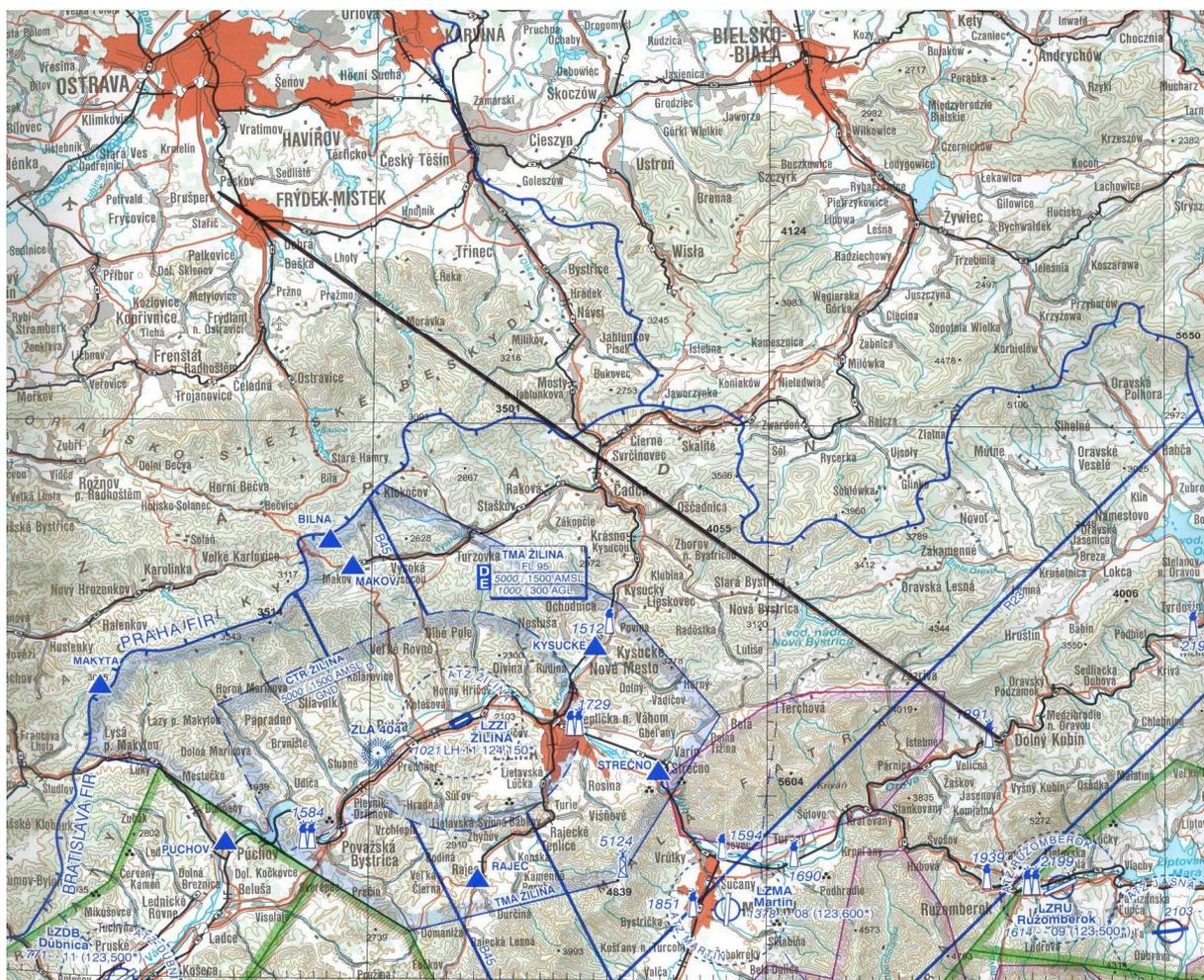
Not applicable.

1.17 Organizational and management information

Not applicable.

1.18 Additional information

Planned flight route above high ground.



1.19 Useful or effective investigation techniques

Standard investigation methods were used.

2. ANALYSIS

2.1 Activity of pilot

The pilot was making a thermic flight over high ground, where the hill tops reach up to 4,000 ft and, due to the height limitation in class G (8000 ft asl), a flight can be difficult from the viewpoint of useful altitude range of 3 – 4,000 ft in case of insufficient updraft and limited areas suitable for field landing. The useful altitude above the highest point of the ground flown over was limited to 2,700 ft, which should enable sufficient final glide within the reported gliding range (1:36), but which did not allow to find more suitable landing area in the unfavourable thermic conditions and insufficient flight altitude.

Moreover, field landing of gliders requires a thorough inspection of the chosen landing site and proper preparation for landing on the chosen surface by the pilots. Besides the orientation to wind, the pilot making selection must take into account the surface, gradient, carrying capacity and type of cover of the landing site. Landing on relatively unknown ground, about which the pilot is only informed by cursory look, puts very high mental requirements on the pilot. All these factors, including the change of speed, often cause damage to gliders, like in this specific case.

3. C O N C L U S I O N S / C A U S E O F A I R A C C I D E N T

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,
- nobody was injured in this air accident.

3.2 Cause of air accident

- incorrect estimate of thermic conditions by the pilot,
- landing on unknown ground with uneven surface covered by grass.

4. FLIGHT SAFETY RECOMMENDATIONS

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

Bratislava, 29.05.2012