



# 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: SKA2012005**

## FINAL REPORT

on investigation of air accident  
of glider **VSO-10 Gradient**  
Registration No. **OM - 6519**

Date: 02.05.2012

Place: Lopej

## A. INTRODUCTION

The investigation of 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 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 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:	Slovenský národný aeroklub SNA (Slovak National Aero Club)
Type of operation:	general aviation
Type of glider:	Orličan VSO-10 Gradient
Registration No.:	OM-6519
Take-off site:	Airport Prievidza / LZPE
Flight phase:	forced landing
Place of accident:	Lopej
Date and time of accident:	02.05.2012, 15:30

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

## B. INFORMATIVE SUMMARY

On 02.05.2012 at 15:30 the pilot making navigation flight with glider VSO-10 Gradient, registration No. OM-6519, could not find suitable thermic conditions and made forced field landing near the community Lopej.

The pilot was not injured in the air accident.

Person appointed for investigation of causes of the air accident:

Ing. Igor BENEK

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

During navigation flight on the route LZPE – Štefanov nad Oravou – Veľký Trábeč – Kráľova Hoľa – Vtáčnik – LZPE, the pilot could not find suitable thermic conditions for continuation of the flight in the area of Jasenie, on his return from turning point Kráľova Hoľa, so he decided for forced field landing. The pilot chose a suitable landing area and started the landing. During the landing manoeuvre the pilot did not have sufficient length of landing run. The glider skipped to a road crossing the end of chosen landing area, where it hit a chuck hole, nosed over and stopped on the field behind the road.

Daytime: Day

Flight rules: VFR

#### 1.2 Injuries to persons

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

#### 1.3 Damage to glider

The glider VSO-10 Gradient remained in one piece after the air accident, with damaged forebody and damaged main-gear well. The glider was slightly damage.



#### 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 the Czech Republic, aged of 31 years,

holder of the glider pilot licence No. CZ/0010513772, issued by the Civil Aviation Authority of the Czech Republic, with marked validity until 14.08.2018.

Medical certificate of 2<sup>nd</sup> class with marked validity until 02.04.2017.

##### Flying experience:

Total flight hours 1855 h 11 min and 1,004 flights

#### 1.6 Aircraft information

##### **Airframe:**

Type:	VSO – 10 Gradient
Registration No.:	OM-6519
Serial No.:	150161
Manufacturer:	Orlíčan Choceň, Czech Republic

#### 1.7 Meteorological situation

Clear sky, cloudiness 3-4/8, visibility 13 km.

#### 1.8 Aids to navigation

Not applicable.

#### 1.9 Communications

Not applicable.

#### 1.10 Aerodrome information

Not applicable.

#### 1.11 Flight recorders and other recorders

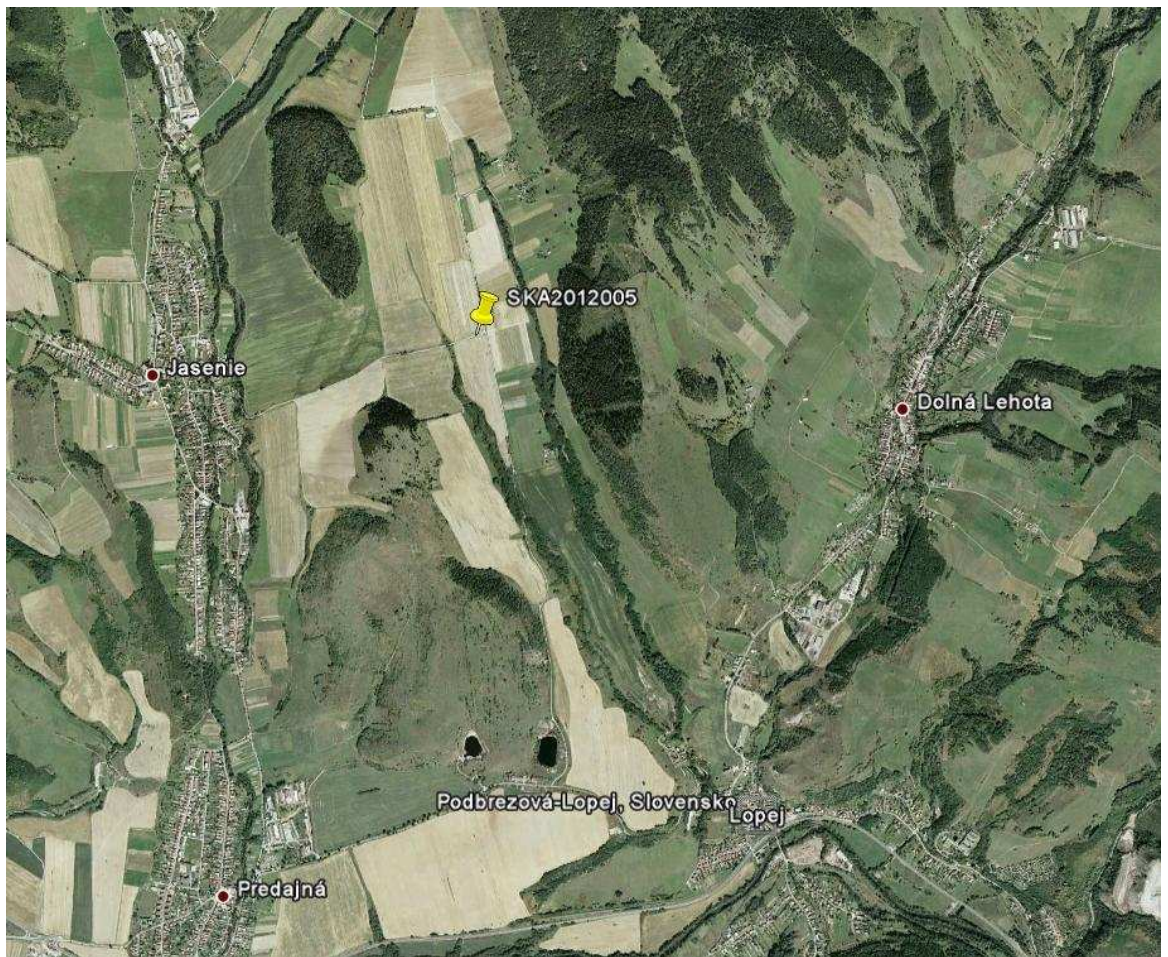
Not applicable.

#### 1.12 Wreckage and impact information

The glider fell to a flat ground without significant obstacles. The place of accident is delimited by geographical coordinates:

N 48°50' 16''

E 019°28' 43''



### 1.13 Medical and pathological information

The pilot was not injured and did not need a medical check.

#### 1.14 **Fire**

No fire broke out.

#### 1.15 **Survival aspects**

Search and rescue using SAR devices were not required.

#### 1.16 **Tests and research**

No tests or expert inspection of the glider were required.

#### 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**

The field landing of gliders requires the inspection of chosen landing area by pilots. Apart from its orientation to the wind, the selection of the landing area must take into account its surface, slope, carrying capacity and type of surface cover. Landing on relatively unknown ground, about which the pilot is informed by cursory look, imposes increased mental requirements on the pilot. All these factors, including the change of speed and orientation of surface wind and surface irregularities, often cause damages to gliders.

After selection of suitable area for forced landing the pilot probably misjudged the altitude and speed of field landing approach and overshoot. At that moment the pilot had not sufficient length of landing run on the selected surface. The glider skipped to a road crossing the end of the selected surface, hit a chuck hole, nosed over and stopped on the field behind the road.

## 3. **C O N C L U S I O N S / CAUSE OF AIR ACCIDENT**

- error of flying technique by the pilot of glider
- incorrect landing briefing.

## 4. **SAFETY RECOMMENDATIONS**

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

Bratislava, 09.07.2012