

*The original of the Final Report was issued in the Slovak language.
In case of inconsistency original version in Slovak language is applicable.*



AVIATION AND MARITIME INVESTIGATION AUTHORITY
Námestie slobody 6, P.O.BOX 100
810 05 Bratislava 15

FINAL REPORT

from the expert investigation of the air accident of
a paraglider of type **AXIS PARA / PLUTO 3ML**
identification number **OM – L041**

Reg. No.: **SKA2016004**

The investigation of occurrence 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 Aircraft Accident and Incident Investigation to the Convention on International Civil Aviation.

The exclusive aim of investigation is to establish causes of accident, 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 occurrence in question have an informative character and can only be used as recommendation for the implementation of measures to prevent occurrence of other accidents and incidents with similar causes.

A. INTRODUCTION

| | |
|-------------------------|---|
| Operator / Owner: | Private person |
| Operation type: | General aviation / sport and recreational flying |
| Type: | Paraglider AXIS PARA / PLUTO 3ML (hereinafter referred to as the "paraglider") |
| Identification number: | OM – L041 |
| Take-off site: | Dolné Srnie – Hradisko |
| Flight phase: | Manoeuvring |
| Accident scene: | Hradisko |
| Accident date and time: | 7 May 2016, 15:40 |

Note: All time data contained in the present Report is UTC time.

B. INFORMATIVE SUMMARY

On 7 May 2016 in the afternoon, approximately after 90 minutes of flying, the paraglider fell and hit the ground after manoeuvring in a turbulent environment.

The following committee has been established to investigate the causes of the air accident:

| | |
|-------------------|---|
| Ing. Zdeno BIELIK | – leader of the expert investigation committee; |
| Ing. Milan BOHUŠ | – member of the expert investigation committee. |

The Report has been issued by:
Aviation and Maritime Investigation Authority
of the Ministry of Transport, Construction and Regional Development of the Slovak Republic.

C. MAIN PART OF THE REPORT

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

1. FACTUAL INFORMATION

1.1 History of the flight

The pilot with the paraglider took off at about 14:10. It was a normal flight during which the pilot performed manoeuvres above Hradisko Hill. At the time of take-off, the wind was suitable for manoeuvring, so-called slope soaring. Approximately after one hour of flight the wind grew stronger, and after about 90 minutes into the flight the pilot got above the meadows at the top of the hill where turbulence occurs with north-easterly wind streams. The pilot lost control of the paraglider, and after the paraglider wing collapsed the paraglider lost altitude and hit the ground.

The air accident was reported by an authorized representative of the Light Aircraft Association of the Slovak Republic to the Aviation and Maritime Investigation Authority of the Ministry of Transport, Construction and Regional Development of the Slovak Republic.

Time: daytime

Flight rules: VFR

1.2 Injuries to persons

| Injury | Crew | Passengers | Other persons |
|-------------|------|------------|---------------|
| Fatal | 1 | - | - |
| Serious | - | - | - |
| Minor | - | - | - |
| No injuries | - | - | - |

1.3 Damage to the paraglider

The paraglider was not damaged during the air accident.

1.4 Other damage

No circumstances have been reported to the Aviation and Maritime Investigation Authority, the result of which third persons might claim damage compensation.

1.5 Personnel information

Pilot :

Citizen of the Slovak Republic, aged 48, holder of a PK-A license issued by the Light Aircraft Association of the Slovak Republic on 23 October 2015, valid until 22 September 2017.

Flight experience:

Total flight hours of the pilot: approximately 20-30 hours according to witness reports

1.6 Paraglider information

Type: Pluto 3ML
Identification number: OM – L041
Serial No: 15403606ML
Manufacturer: AXIS PARA

Certificate of airworthiness issued by the Light Aircraft Association of the Slovak Republic No. 16091, valid until 6 July 2016.

1.7 Meteorological information

On 7 May 2016 at 15:00, low cloud conditions prevailed and there was no atmospheric precipitation in the Dolné Srnie municipality, Hradisko Hill site. The prevailing cloud types were cumulus fractus and cumulus humilis to cumulus mediocris, with a cloud base at approximately 2,000 m. The air temperature was approximately 20 °C and relative humidity was around 30%. Visibility was 40-50 km. A mild to chilly north-easterly wind was blowing; its speed was 5-7 m/s.

On 7 May 2016 at about 15:00, air streams in the atmosphere above the Dolné Srnie municipality were as follows:

at 1,000 m above sea level, an east to north-east wind was blowing, wind speed was around 6 m/s and air temperature was around 11 °C. We suppose that on the windward side, i.e. the north-eastern side of Hradisko Hill, at levels lying approximately at the level of its summit and above, wind currents got denser, which might have increased the average wind speed by up to 2 m/s. At lower levels from the summit, on the windward side of the hill, air flow was moving around an orographic obstacle on both sides and downward streams could have originated at the place where the wind currents divided.

1.8 Aids to navigation

NA

1.9 Communications

NA

1.10 Aerodrome information

Take-off site: Dolné Srnie – Hradisko.

1.11 Flight recorders and other recording equipment

NA

1.12 Wreckage and impact information

The pilot crashed in a meadow above the take-off site.



1.13 **Medical and pathological information**

From the point of view of forensic medicine, death was caused by violent death - multiple injuries. At the time of the air accident, the pilot was not under the influence of alcohol, drugs or ordinary pharmaceuticals which may have decreased his awareness during the flight.

1.14 **Fire**

Did not start.

1.15 **Survival aspects**

It was not necessary to perform a search and rescue operation using SAR equipment.

1.16 **Tests and research**

It was not necessary to perform any tests or expert examination of the paraglider.

1.17 **Organizational and management information**

Flight activities were performed in harmony with aviation and tourism regulations valid in the territory of the Slovak Republic.

1.18 **Additional information**

NA

1.19 **Useful or effective investigation techniques**

Common investigation forms were used.

2. ANALYSIS

Pilot activities

When flying down Hradisko Hill near Dolné Srnie, the pilot with little flying experience was performing slope soaring during which the wind speed rose and the paraglider was blown beyond the tree line above the meadows into a turbulent area. The pilot could not eliminate the unfavourable influence of the above-stated turbulence and after the paraglider wing collapsed the paraglider crashed.

3. CONCLUSION / Cause of the air accident

3.1 Findings

The Pilot

- according to the submitted documentation, the pilot had valid qualifications for performing flights in the particular paraglider category;
- had no flight recorder;
- at the time of the air accident, he was not under the influence of alcohol, drugs or ordinary pharmaceuticals which may have decreased his awareness during the flight.

The Paraglider

Had valid documentation and did not demonstrate any malfunction prior to the air accident.

3.2 Causes of the air accident

Insufficient experience and failure to master the piloting technique in a turbulent environment.

4. SAFETY RECOMMENDATIONS

The Final Report from investigation of the air accident does not contain any recommendations.

In Bratislava, 9 November 2016