

*The original of the Final Report was issued in the Slovak language.
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AVIATION AND MARITIME INVESTIGATION AUTHORITY
Námestie slobody 6, P.O.BOX 100
810 05 Bratislava 15

FINAL REPORT

on the safety investigation of an incident
of a glider type **VSO-10**
with registration mark **OM-0509**

Reg. No: **SKI2018091**

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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:	Aeroclub Trenčín
Operation type:	General aviation/sports and recreational flying
Glider type:	VSO-10
Registration mark:	OM-0509
Take-off site:	Trenčín aerodrome / LZTN
Flight phase:	Thermal flight
Incident site:	Airspace – aerodrome traffic zone of Dubnica nad Váhom/ ATZ LZDB
Incident date and time:	10 June 2018 12:50

Note: All time data in this Report is reported in UTC time.

B. INFORMATIVE SUMMARY

When performing a thermal flight on 10 June 2018, the pilot of a glider type VSO-10, registration mark OM-0509 (hereinafter referred to as the "glider"), entered the ATZ LZDB with no radio contact at the time when parachuting operations were being carried out above the aerodrome. Then the glider came critically close to a parachutist performing a tandem skydive jump.

Nobody was injured and the aircraft was not damaged during the incident.

A committee was set up to investigate the causes of the incident:

Ing. Juraj Gyenes - Chairman of the Safety Investigation Committee
Miroslav Gábor - Member of the Safety Investigation Committee.

The report is issued by:

Aviation and Maritime Investigation Authority
of the Ministry of Transport and Construction 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

On 10 June 2018 a pilot, member of the Aeroclub Trenčín, was performing a thermal flight in the airspace above the Červený Kameň municipality, approximately 5 km to the north of the boundary of ATZ LZDB at 2,500 m AGL. Due to local thunderstorms in the above-stated area, the pilot decided to continue flying southwards. Then he entered the ATZ LZDB and continued flying, descending slightly, directly above the aerodrome where a parachute drop flight was being carried out at that moment from 4,000 m AGL. The ground staff involved in the parachuting operations at LZDB spotted the glider at the moment when a parachute drop was being carried out. Four independently jumping parachutists and two parachutists - tandem pilots with passengers were jumping off the aeroplane during the parachute drop flight. Since the pilot did not know what airspace he was in, he had not tuned into the required frequency on his radio station and it was not possible to give him information about the parachute drop which was being carried out or an instruction to immediately change the direction of his flight. As a result of his activities, the glider pilot went directly under the free-falling parachutists at 2,000 m above the aerodrome. After jumping out of the aeroplane, one of the tandem pilots spotted the glider approaching his free-fall zone from the north. He made a 90⁰ turn and started gliding off as far as he could. Then he cleared the glider by 20 m while opening his parachute. The glider pilot learnt of the situation only from the pilot of the aeroplane performing the parachute drop flight who was trying to establish contact on the frequencies of the surrounding aerodromes when descending. After contact had been established on 123.600 MHz – Trenčín aerodrome, the pilot and the aeroplane were identified.

Then the incident was reported to air traffic manager of Aeroclub Trenčín and to the SNA flight activities director.

Time period: day

Flight rules: VFR

1.2 Injuries to persons

No injuries.

1.3 Damage

No damage to the aircraft.

1.4 Other damage

No circumstances have been reported to the Aviation and Maritime Investigation Authority which might lead to any other claims for compensation of damage against a third party.

1.5 Personnel information

Pilot:

Citizen of the Slovak Republic, aged 35, holder of a GPL issued by the Transport Authority of the Slovak Republic with marked validity until 31 December 2019.

Medical certificate class 2 with marked validity until 24 March 2021.

Radiotelephony Restricted Operators Certificate OFI-20/2016.

Flight experience:

Total flight hours: 61 hrs 58 min / 111 flights.

1.6 Aircraft information

Type: VSO-10
Registration mark: OM-0509
Serial number: 150027
Manufacturer: Orličan

Airworthiness Certificate No. 0274-S issued by the Transport Authority of SR.

Airworthiness Verification Certificate No. 0274-S/10 issued SK.MG013, with marked validity until 5 May 2019.

Mandatory insurance: Allianz poisťovňa, a.s. No.491100743, valid until 31 March 2019.

1.7 Meteorological information

It was clear above LZDB; cumulonimbus storm clouds had formed to the north and north-west of the aerodrome.

1.8 Aids to navigation

N/A

1.9 Communications

The glider pilot's radio station was tuned to the LZTN frequency -123.600 MHz - throughout the whole flight.

1.10 Aerodrome information

LZDB is a public national aerodrome with irregular traffic and it is located 3.5 km to the west of Ilava. The grass RWY 05L (23R) is 1100 x 36 m; RWY 05R (23L) is 1100 x 60 m. The RWY's altitude above sea level is 771 ft / 235 m.

At the time of the incident parachuting operations were activated from 07:00 to 18:00 at the aerodrome and the CTAF service was provided on 123.500 MHz.

1.11 Flight recorders

N/A

1.12 Wreckage and impact information

N/A

1.13 Medical and pathological information

No injuries.

1.14 Fire

None.

1.15 Survival aspects

It was not necessary to perform any investigation or rescue with SAR equipment.

1.16 Tests and research

N/A

1.17 Organizational and management information

Flight operations were organized by the Aeroclub Trenčín and performed in accordance with aviation regulations valid in the territory of the Slovak Republic along with SNA Regulations.

The parachuting operation was organized by Aeroclub Dubnica.

Pursuant to Act No. 83/1990 Coll., aeroclubs are voluntary associations of citizens performing pastime and sporting activities in the area of powered flying, gliding and parachuting. They are voluntarily associated within a higher organizational unit – the Slovak National Aeroclub of Gen. M.R. Štefánik based in Žilina.

1.18 Additional information

N/A

1.19 Useful or effective investigation techniques

Common investigation methods were applied.

2. ANALYSIS

2.1. Pilot activity

Before a flight a glider pilot is obliged to perform sufficient pre-flight preparation for the planned or expected route and have all available information for any potential change to the planned route. One of the most important principles of safe flying is that in every phase of the flight the pilot needs to know what airspace he is in.

With regard to the flight in question, the pilot did not plan any particular route but, according to his statement, he was intending to fly north-east to Žilina and back again. As a result of the change in weather, i.e. the gradual increase in CB storm clouds in the area of Červený Kameň, he decided to fly southwards and then back to the aerodrome of departure, LZTN. He did not realize that his changed route crossed the ATZ LZDB where parachuting operations were activated at that time and all flights arriving to, departing from and crossing such a zone need to follow the procedures laid down in the "Rules for Parachuting Operations", MoTPT SR version No. 4/2010. This means that before entering an activated ATZ for parachute drops, the pilot is obliged to establish radio contact to acquire information, or to fly around the ATZ. However, the pilot had the frequency of his aerodrome of departure tuned in all the time so the CTAF service at LZDB could not warn him about the parachute drops being performed.

When flying above LZDB, the glider came dangerously close to a parachutist. According to the glider pilot's statement, the pilot did not notice the situation around him and he continued flying towards Trenčianske Teplice. He learnt of the situation only from radio communication with the pilot of the aeroplane performing the parachute drops who managed to establish radio contact on his frequency.

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3. CONCLUSIONS / Cause of the incident

3.1 Findings

Pilot

- According to the submitted documentation, the pilot had valid qualifications for performing individual flights with the particular aircraft category;
- According to his total flight hours, the glider pilot is moderately advanced.

Aircraft

The aircraft had all valid documentation and was capable of performing the flight in question; it did not demonstrate any failure before the incident.

3.2 Causes of the incident

- Insufficient pre-flight preparation of the glider pilot for the planned flight;
- Lack of knowledge of the procedures contained in the "Rules for Parachuting Operations", MoTPT SR version No. 4/2010.

4. SAFETY RECOMMENDATIONS

The Final Report on investigation of the incident does not contain any recommendations.

In Bratislava, on 31 August 2018