

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

Air Accident and Incident Investigation Board Nám. slobody 6, P.O. BOX.100, 810 05 Bratislava 15

Reg. No: SKA2010010

# FINAL REPORT

on investigation of an air accident of aircraft type **VSO-10**Registration No. **OM - 8509** 

Date: 05.07.2010

Place: agricultural land Tužina

#### 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, 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 an accident or serious incident and 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 have 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: SNA gen. M. R. Štefánika / Aero Club Žilina

Type of operation: general aviation

Type of aircraft: VSO-10

Registration No: OM - 8509

Take-off site: Airport LZPT

Flight phase: landing

Place of accident: agricultural land Tužina

Date and time of accident: 05.07.2010, 13:30 hrs

Note: All times in this Report are UTC.

# **B. INFORMATIVE SUMMARY**

On 5 July 2010, during a competitive flight, the pilot of the sailplane landed on agricultural land Tužina. The sailplane got damaged in the landing.

The pilot of the sailplane was not injured.

The following person was appointed as investigator of the air accident:

Lic. MIČEKOVÁ Jaroslava

The report is issued by:

Air Accident and Incident Investigation Board 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 the 5th competitive flight the thermal conditions worsened, so the pilot decided to make a ground landing in selected area. He chose the agricultural land Tužina. At that time, aeromodellers were active on the west side of the agricultural land (parking vehicles and a group of aeromodellers), but the landing ground was clear. The pilot decided to land against wind, i.e. in the south direction, not to endanger the aeromodellers' safety.

The sailplane came into contact with the runway just behind the north threshold. But the headwind envisaged by the pilot changed direction from south-west to north-east. The change of wind direction together with the runway gradient caused the extension of the landing run beyond the south threshold of the runway, behind which a meadow with ground wave is situated.

During braking the sailplane with raised tail wheel ran down the ground wave and got damaged.

Daytime: Daylight Flight rules: VFR

### 1.2 Injuries to persons

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

#### 1.3 **Damage to aircraft**

After the air accident the sailplane stayed in one piece with the lower joint of the fuselage come loose in the length of 20-30 cm and with the floor detached from the side laminate of the cockpit.

The sailplane lost the airworthiness. The assessment of the scope of damage to the sailplane and performance of repairs in the authorized organization AMO were ordered.

#### 1.4 Other damages

The Air Accident and Incident Investigation Board was not informed about circumstances with potential claims for compensation of other damages toward a third party.

#### 1.5 **Personnel information**

Not applicable.

#### 1.6 Aircraft information

#### **Airframe**

Type: VSO - 10, Registration No: OM-8509 Serial No: 150195, Year of manufacture: 1988

Manufacture: Orličan-Czech Republic

Certificate of airworthiness No. 3453 issued by the Civil Aviation Authority of Slovak Republic with valid Certificate of airworthiness inspection No. 3453/02.

# 1.7 Meteorological information

Not applicable.

# 1.8 Aids to navigation

Not applicable.

#### 1.9 Communications

The sailplane was equipped by a radio communication system enabling a two-way communication with all air stations at any moment of flight.

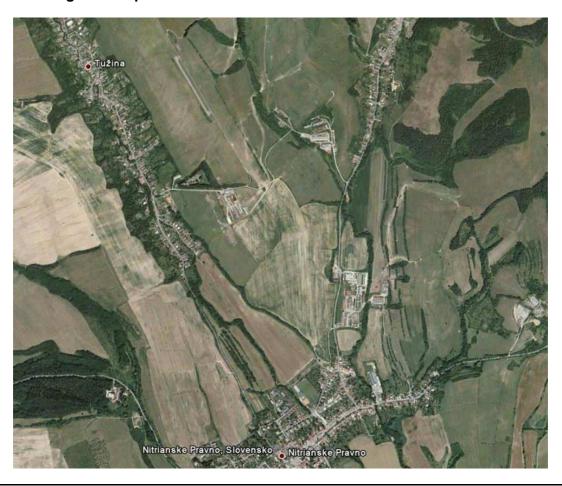
#### 1.10 Aerodrome information

Not applicable.

### 1.11 Flight recorders

Not applicable.

# 1.12 Wreckage and impact information



#### 1.13 Medical and pathological information

The pilot was not injured; his medical examination was not required.

#### 1.14 Fire

Not applicable.

## 1.15 Survival aspects

Search and rescue using SAR means were not required.

#### 1.16 Tests and research

No tests or expert inspection of the sailplane parts had to be conducted.

#### 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 ground landing of sailplanes requires the inspection of the selected landing ground by pilots. The selection of the landing ground must take into account the orientation of the ground in relation to the wind, its surface, gradient, carrying capacity and type of vegetation cover.

A landing on relatively unknown ground, about which the pilot is only informed by a cursory look, puts high psychological requirements on the pilot. All these factors, including the change of speed and orientation of ground wind and uneven surface, often caused damage to sailplanes.

This air accident shows the presence of a majority of the circumstances referred to above and, as it follows from the pilot's statement, the change of wind direction and the gradient of the landing ground caused the extension of landing run with subsequent damage to the sailplane.

# 3. CONCLUSIONS/ Cause of air accident

Poor mastering of the flying technique by the sailplane pilot making the landing.

# 4. SAFETY RECOMMENDATIONS

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

Bratislava, 1 April 2011